

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Jeffrey E. Russel Examiner #: 62785 Date: 4-6-2004  
Art Unit: 1654 Phone Number: 571-272-0969 Serial Number: 101030388  
Mail Box and Bldg/Room Location: REM 3D11 (mailbox), 3D19 (office) Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Radiolabeled Mammalian Tachykinin Peptide Analogue  
Inventors (please provide full names): P. Armua

CRFE

Earliest Priority Filing Date: 5-21-2002

*\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search SEQ ID NO:1 (FX GLM) in STN,  
in the U.S. patent application sequence database (pending, published,  
and issued) and in Geneseq/Swissprot/PIR. Please require any  
hits to have 15 or fewer residues.

Thank you.

JER

\*\*\*\*\*

10/030388

(FILE 'REGISTRY' ENTERED AT 14:59:16 ON 07 APR 2004)  
 L5 4109 S F[FIV]GLM/SQSP  
 L6 2407 S L5 AND SQL=<15

FILE 'HCAPLUS' ENTERED AT 15:00:15 ON 07 APR 2004  
 L5 4109 SEA FILE=REGISTRY ABB=ON PLU=ON F[FIV]GLM/SQSP  
 L6 2407 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND SQL=<15  
 L7 14575 SEA FILE=HCAPLUS ABB=ON PLU=ON L6  
 L9 113 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND (RADIOLABEL? OR  
 RADIO LABEL?)  
 L10 51 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND TACHYKININ  
 L16 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND MAMMAL?

L16 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 03 Sep 2002

ACCESSION NUMBER: 2002:662100 HCAPLUS

DOCUMENT NUMBER: 138:19555

TITLE: Central neuropeptide systems and respiratory  
 control during development

AUTHOR(S): Moss, Immanuela Rave; Laferriere, Andre

CORPORATE SOURCE: Development Respiratory Laboratory, The Research  
 Institute of the McGill University Health  
 Centre, Montreal, QC, H3H 1P3, Can.

SOURCE: Respiratory Physiology & Neurobiology (2002),  
 131(1-2), 15-27

CODEN: RPNEAV; ISSN: 1569-9048

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. The substance P/neurotachykinin-1 (NK-1) and the  
 $\mu$ -opioid G protein-coupled receptor systems endow brain-stem  
 respiratory regions and display discrete developmental patterns.  
 Hypoxia-induced neuropeptide release may increase receptor  
 endocytosis, reducing receptor accessibility to ligands. We  
 wondered whether the attenuated respiratory response to hypoxia of  
 developing piglets after single or repeated daily hypoxic exposure  
 is influenced by differential endocytosis of NK-1 vs.  $\mu$ -opioid  
 receptors. Whereas the long-term (24 h) response of both receptors  
 to recurrent hypoxia in piglet brainstem is similar, i.e.  
 upregulation, the short-term (5 min) response to single or recurrent  
 hypoxia, albeit in rats, is different: **radiolabeled** NK-1  
 receptors are greatly reduced, suggesting enhanced endocytosis, but  
 $\mu$ -opioid receptors remain unchanged, implying unaltered  
 endocytosis. If confirmed in piglet brainstem, this difference  
 would produce relatively more available  $\mu$ -opioid receptors to  
 opioid peptides in hypoxia that might contribute to the attenuated  
 respiratory responses to single and repeated hypoxia during  
 development.

IT 33507-63-0, Substance P

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (central neuropeptide systems and respiratory control during  
 development)

REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L16 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ED Entered STN: 12 Jan 2001  
 ACCESSION NUMBER: 2001:31364 HCAPLUS  
 DOCUMENT NUMBER: 134:82815  
 TITLE: A radiolabeled mammalian  
 tachykinin peptide analogue  
 INVENTOR(S): Ortiz Armua, Pedro  
 PATENT ASSIGNEE(S): Spain  
 SOURCE: PCT Int. Appl., 12 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002021	A2	20010111	WO 2000-IB1260	20000705
WO 2001002021	A3	20020207		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1196200	A2	20020417	EP 2000-954837	20000705
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
ZA 2002000096	A	20030404	ZA 2002-96	20020104
PRIORITY APPLN. INFO.:			ES 1999-1489	A 19990705
			WO 2000-IB1260	W 20000705

- AB A radiolabeled mammalian tachykinin peptide analog; use of the analog for mammalian in vivo tachykinin peptide receptor imaging; and a diagnostic kit comprising the analog are described. 99mTc-labeled substance P, prepared using 2-iminothiolane as linker, showed good uptake in salivary glands of mice.
- IT 33507-63-ODP, Substance P peptide, 99mTc-labeled  
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (radiolabeled mammalian tachykinin peptide analog for diagnostic imaging)
- IT 4846-01-9D, Phe-Ile-Gly-Leu-Met-NH<sub>2</sub>, radiolabeled derivs. 51165-05-0D, Phe-Phe-Gly-Leu-Met-NH<sub>2</sub>, radiolabeled derivs. 86933-74-6D, Neurokinin A, radiolabeled 86933-74-6D, Neurokinin A, radiolabeled derivs. 86933-75-7D, Neurokinin B (swine spinal cord), radiolabeled 89671-31-8D, Phe-Val-Gly-Leu-Met-NH<sub>2</sub>, radiolabeled derivs.  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (radiolabeled mammalian tachykinin peptide analog for diagnostic imaging)

L16 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
ED Entered STN: 17 Feb 1990

ACCESSION NUMBER: 1990:49215 HCAPLUS

DOCUMENT NUMBER: 112:49215

TITLE: Identification of immunoreactive substance P in human and other **mammalian** endothelial cells

AUTHOR(S): Linnik, Matthew D.; Moskowitz, Michael A.

CORPORATE SOURCE: Neurol. Neurosurg. Serv., Massachusetts Gen. Hosp., Boston, MA, 02114, USA

SOURCE: Peptides (New York, NY, United States) (1989), 10(5), 957-62

CODEN: PPTDD5; ISSN: 0196-9781

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The existence of the vasodilatory **tachykinin** substance P within endothelial cell scrapings from human, rat, and dog thoracic aorta and human pial arteries with values ranging from 1.0 (rat aorta) to 1.9 (dog aorta) fmol/mg protein is described. The immunoreactive component eluted with a retention time identical to that of **radiolabeled** substance P when analyzed by HPLC combined with RIA. Cultured endothelial cells from bovine cerebral microvessels contained measurable levels of substance P in passages 3-8, suggesting the likelihood that these cells synthesize substance P. However, the level of gene expression must be low since efforts to demonstrate the presence of preprotachykinin mRNA by Northern blot anal. of dog and rat aortic endothelial cell RNA or by RNase protection anal. of rat aortic endothelial cell RNA were not successful.

IT 33507-63-0, Substance P

RL: BIOL (Biological study)

(in vascular endothelium, of humans and other **mammals**)

L16 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
ED Entered STN: 30 Apr 1989

ACCESSION NUMBER: 1989:148516 HCAPLUS

DOCUMENT NUMBER: 110:148516

TITLE: Substance P and substance K receptor binding sites in the human gastrointestinal tract: localization by autoradiography

AUTHOR(S): Gates, T. S.; Zimmerman, R. P.; Mantyh, C. R.;

Vigna, S. R.; Maggio, J. E.; Welton, M. L.;

Passaro, E. P., Jr.; Mantyh, P. W.

CORPORATE SOURCE: Cent. Ulcer Res. Educ., VA Med. Cent. Wadsworth, Los Angeles, CA, 90073, USA

SOURCE: Peptides (New York, NY, United States) (1988), 9(6), 1207-13

CODEN: PPTDD5; ISSN: 0196-9781

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Quant. receptor autoradiog. was used to localize and quantify the distribution of binding sites for **125I-radiolabeled** substance P (SP), substance K (SK) and neuromedin K (NK) in the human gastrointestinal (GI) tract using histol. normal tissue obtained from uninvolved margins of resections for carcinoma. The

distribution of SP and SK binding sites is different for each gastrointestinal segment examined. Specific SP binding sites are expressed by arterioles and venules, myenteric plexus, external circular muscle, external longitudinal muscle, muscularis mucosa, epithelial cells of the mucosa, and the germinal centers of lymph nodules. SK binding sites are distributed in a pattern distinct from SP binding sites and are localized to the external circular muscle, external longitudinal muscle, and the muscularis mucosa. Binding sites for NK were not detected in any part of the human GI tract. Thus, surgical specimens from the human GI tract can be effectively processed for quant. receptor autoradiog. Of the 3 **mammalian tachykinins** tested, SP and SK, but not NK, binding sites are expressed in detectable levels in the human GI tract. Although SK receptor binding sites are expressed almost exclusively by smooth muscle, SP binding sites are expressed by smooth muscle cells, arterioles, venules, epithelial cells of the mucosa and cells associated with lymph nodules; both SP and SK binding sites expressed by smooth muscle are more stable than are SP binding sites expressed by blood vessels, lymph nodules, and mucosal cells.

IT 86933-75-7, Neuromedin K

RL: PROC (Process)

(binding of, by gastrointestinal tract of human)

IT 33507-63-0, Substance P 86933-74-6

RL: BIOL (Biological study)

(receptors for, of gastrointestinal tract of human, localization of)

L16 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 01 Nov 1986

ACCESSION NUMBER: 1986:546964 HCAPLUS

DOCUMENT NUMBER: 105:146964

TITLE: Characterization of a neurokinin B receptor site in rat brain using a highly selective radioligand

AUTHOR(S): Laufer, Ralph; Gilon, Chaim; Chorev, Michael; Selinger, Zvi

CORPORATE SOURCE: Otto Loewi Cent. Neurobiol., Inst. Life Sci., Jerusalem, 91904, Israel

SOURCE: Journal of Biological Chemistry (1986), 261(22), 10257-63

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A **tachykinin** receptor subtype (SP-N), whose preferred ligand is the **mammalian** neuropeptide neurokinin B [86933-75-7], was investigated with the **radiolabeled** peptide 5-11-N $\alpha$ -([125I]desamino-3-iodotyrosyl)-[Asp5,6-N-methyl-Phe8]-substance P (I) [104499-96-9], which selectively interacts with the SP-N receptor subtype. The binding of I to rat cerebral cortex membranes was studied under conditions that minimized nonspecific binding. Unlike other **tachykinin** receptor probes, this radioligand is not degraded during the binding experiment. Binding of I is reversible, saturable, and of high affinity (dissociation constant = 0.9 nM). The radioligand labels a single class of binding site (122 fmol binding sites/mg of protein), as indicated by a linear Scatchard plot and a Hill coefficient close to unity (1.05).

The pharmacol. specificity of this binding site corresponds to that of the neuronal SP-N receptor in guinea pig ileum myenteric plexus, which was determined by a functional bioassay. Among various rat brain regions, the highest binding was observed in the cerebral cortex, olfactory bulb, hypothalamus, and hippocampus. The results suggest the existence and specific distribution of a neurokinin B receptor site of the SP-N type in rat brain. I is the 1st selective and potent probe for this receptor and is thus an important tool for further studies of its distribution, regulation, and functional role.

- IT 103445-39-2  
RL: PROC (Process)  
(neurokinin B receptor binding of, in brain)
- IT 104499-96-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and neurokinin B receptor characterization with)
- IT 104499-97-0  
RL: PROC (Process)  
(radioiodination and neurokinin B receptor binding of)
- IT 86933-75-7  
RL: BIOL (Biological study)  
(receptor for, of brain, selective probe for)

E1 THROUGH E9 ASSIGNED

FILE 'REGISTRY' ENTERED AT 15:07:34 ON 07 APR 2004

L18 9 SEA FILE=REGISTRY ABB=ON PLU=ON (33507-63-0/BI OR  
86933-74-6/BI OR 86933-75-7/BI OR 103445-39-2/BI OR  
104499-96-9/BI OR 104499-97-0/BI OR 4846-01-9/BI OR  
51165-05-0/BI OR 89671-31-8/BI)

=> s l18 and l5

L20 9 L18 AND L5

L20 ANSWER 1 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 104499-97-0 REGISTRY

CN L-Methioninamide, L- $\alpha$ -aspartyl-L- $\alpha$ -aspartyl-L-phenylalanyl-N-methyl-L-phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Aminosenktide

SQL 7

SEQ 1 DDFFGLM

=====

HITS AT: 3-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 135:298650

REFERENCE 2: 130:119984

REFERENCE 3: 130:20972

Searcher : Shears 571-272-2528

REFERENCE 4: 129:131634

REFERENCE 5: 125:318273

REFERENCE 6: 120:210557

REFERENCE 7: 120:46561

REFERENCE 8: 120:24074

REFERENCE 9: 118:205901

REFERENCE 10: 118:33494

L20 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 104499-96-9 REGISTRY

CN L-Methioninamide, N-[3-[4-hydroxy-3-(iodo-125I)phenyl]-1-oxopropyl]-  
L- $\alpha$ -aspartyl-L- $\alpha$ -aspartyl-L-phenylalanyl-N-methyl-L-  
phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

SQL 7

SEQ 1 DDFFGLM

=====

HITS AT: 3-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 105:146964

L20 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 103445-39-2 REGISTRY

CN L-Methioninamide, 5-oxo-L-prolyl-L-phenylalanyl-N-methyl-L-  
phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

SQL 6

SEQ 1 XFFGLM

=====

HITS AT: 2-6

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 130:25326

REFERENCE 2: 119:181203

REFERENCE 3: 110:166270

REFERENCE 4: 109:205353

REFERENCE 5: 109:17666

REFERENCE 6: 107:229502

REFERENCE 7: 106:150010

REFERENCE 8: 105:146964

REFERENCE 9: 105:57318

L20 ANSWER 4 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 89671-31-8 REGISTRY  
CN L-Methioninamide, L-phenylalanyl-L-valylglycyl-L-leucyl- (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 6-10-Neurokinin  $\alpha$   
CN Phe-Val-Gly-Leu-Met-NH<sub>2</sub>  
CI COM  
SQL 5

SEQ 1 FVGLM

=====

HITS AT: 1-5

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 134:82815

REFERENCE 2: 133:190228

REFERENCE 3: 124:165481

REFERENCE 4: 122:151508

REFERENCE 5: 121:108267

REFERENCE 6: 116:121078

REFERENCE 7: 113:224635

REFERENCE 8: 104:168810

REFERENCE 9: 104:142380

REFERENCE 10: 103:196387

L20 ANSWER 5 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 86933-75-7 REGISTRY  
CN Neurokinin B (swine spinal cord) (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Kassinin, 2-L-methionine-3-L-histidine-4-de-L-lysine-5-de-L-serine-7-L-phenylalanine-  
OTHER NAMES:  
CN L-Methioninamide, L- $\alpha$ -aspartyl-L-methionyl-L-histidyl-L- $\alpha$ -aspartyl-L-phenylalanyl-L-phenylalanyl-L-valylglycyl-L-leucyl-  
CN Neurokinin  $\beta$   
CN Neurokinin  $\beta$  (pig spinal cord)  
CN Neurokinin B (human)  
CN Neurokinin B (pig spinal cord)  
CN Neurokinin B (porcine)  
CN Neuromedin K  
CN Neuromedin K (pig spinal cord)

Searcher : Shears 571-272-2528



10/030388

CN Porcine neurokinin B  
CN Zneurok1 (human)  
CI COM  
SQL 10

SEQ 1 DMHDFVGLM

=====

HITS AT: 6-10

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 140:174859

REFERENCE 2: 140:157919

REFERENCE 3: 140:71480

REFERENCE 4: 140:71475

REFERENCE 5: 139:391722

REFERENCE 6: 139:375562

REFERENCE 7: 139:362106

REFERENCE 8: 139:286548

REFERENCE 9: 139:224854

REFERENCE 10: 139:208098

L20 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 86933-74-6 REGISTRY

CN Neurokinin A (swine spinal cord) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Kassinin, 1-de-L-aspartic acid-2-de-L-valine-3-L-histidine-5-L-threonine-7-L-serine-

OTHER NAMES:

CN L-Methioninamide, L-histidyl-L-lysyl-L-threonyl-L- $\alpha$ -aspartyl-L-seryl-L-phenylalanyl-L-valylglycyl-L-leucyl-

CN Neurokinin  $\alpha$

CN Neurokinin  $\alpha$  (pig spinal cord)

CN Neurokinin  $\alpha$  (porcine)

CN Neurokinin A

CN Neurokinin A (alligator)

CN Neurokinin A (pig spinal cord)

CN Neurokinin A (Python molurus)

CN Neuromedin L

CN Neuromedin L (pig spinal cord)

CN Porcine neurokinin A

CN Substance K

CI COM

SQL 10

SEQ 1 HKTDSFVGLM

=====

Searcher : Shears 571-272-2528

HITS AT: 6-10

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 140:229875

REFERENCE 2: 140:193438

REFERENCE 3: 140:193061

REFERENCE 4: 140:174869

REFERENCE 5: 140:174859

REFERENCE 6: 140:157919

REFERENCE 7: 140:140827

REFERENCE 8: 140:123112

REFERENCE 9: 140:107276

REFERENCE 10: 140:71486

L20 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 51165-05-0 REGISTRY

CN L-Methioninamide, L-phenylalanyl-L-phenylalanylglycyl-L-leucyl-  
(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 7-11-Substance P

CN Phe-Phe-Gly-Leu-Met-NH2

CN Substance P pentapeptide

CI COM

SQL 5

SEQ 1 FFGLM

=====

HITS AT: 1-5

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 139:341728

REFERENCE 2: 139:144282

REFERENCE 3: 138:21218

REFERENCE 4: 137:195720

REFERENCE 5: 136:366698

REFERENCE 6: 136:260222

REFERENCE 7: 136:227036

REFERENCE 8: 135:283312

Searcher : Shears 571-272-2528

REFERENCE 9: 134:82815

REFERENCE 10: 133:190228

L20 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 33507-63-0 REGISTRY

CN Substance P (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1: PN: US20020037833 SEQID: 1 unclaimed sequence

CN 21: PN: WO0181408 SEQID: 44 claimed protein

CN 690: PN: WO2004005342 PAGE: 46 claimed protein

CN L-Methioninamide, L-arginyl-L-prolyl-L-lysyl-L-prolyl-L-glutaminy-L-glutaminy-L-phenylalanyl-L-phenylalanylglycyl-L-leucyl-

CN Neurokinin P

CN Substance P (1-11)

CN Substance P (peptide)

CN Substance P (smooth-muscle stimulant)

CI COM

SQL 11

SEQ 1 RPKPQQFFGL M

=====

HITS AT: 7-11

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 140:234337

REFERENCE 2: 140:233882

REFERENCE 3: 140:233683

REFERENCE 4: 140:233682

REFERENCE 5: 140:233642

REFERENCE 6: 140:233061

REFERENCE 7: 140:232998

REFERENCE 8: 140:231826

REFERENCE 9: 140:230888

REFERENCE 10: 140:229887

L20 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 4846-01-9 REGISTRY

CN L-Methioninamide, L-phenylalanyl-L-isoleucylglycyl-L-leucyl- (9CI)  
(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Methioninamide, L-phenylalanyl-L-isoleucylglycyl-L-leucyl-, L- (7CI)

CN Phyllomedusin, 1-de(5-oxo-L-proline)-2-de-L-asparagine-3-de-L-proline-4-de-L-asparagine-5-de-L-arginine- (8CI)

OTHER NAMES:

Searcher : Shears 571-272-2528

10/030388

CN Eledoisin(7-11)  
CN Phe-Ile-Gly-Leu-Met-NH2  
CI COM  
SQL 5

SEQ 1 FIGLM

=====

HITS AT: 1-5

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 134:82815  
REFERENCE 2: 124:165481  
REFERENCE 3: 122:151508  
REFERENCE 4: 113:224635  
REFERENCE 5: 112:51088  
REFERENCE 6: 99:116778  
REFERENCE 7: 91:21126  
REFERENCE 8: 90:204506  
REFERENCE 9: 88:23378  
REFERENCE 10: 77:13876

FILE 'HOME' ENTERED AT 15:08:24 ON 07 APR 2004

Searcher : Shears 571-272-2528

OM protein - protein search, using sw model

Run on: April 7, 2004, 09:21:32 ; Search time 39 Seconds  
(without alignments)  
40.451 Million cell updates/sec

Title: US-10-030-388A-1  
Perfect score: 22  
Sequence: 1 FXGLM 5

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1017041 seqs, 315518202 residues

Total number of hits satisfying chosen parameters: 3954

Minimum DB seq length: 0  
Maximum DB seq length: 15

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 1000 summaries

Database : SPTREMBL\_25:\*  
1: sp\_archaea:\*  
2: sp\_bacteria:\*  
3: sp\_fungi:\*  
4: sp\_human:\*  
5: sp\_invertebrate:\*  
6: sp\_mammal:\*  
7: sp\_mhc:\*  
8: sp\_organelle:\*  
9: sp\_phage:\*  
10: sp\_plant:\*  
11: sp\_rodent:\*  
12: sp\_virus:\*  
13: sp\_vertebrate:\*  
14: sp\_unclassified:\*  
15: sp\_rvirus:\*  
16: sp\_bacteriap:\*  
17: sp\_archeap:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result	Query	
No.	Score Match Length DB ID	Description
-----		

1	20	90.9	11	5	Q9UAR8	Q9uar8 aedes aegyp
2	18	81.8	15	11	Q924T1	Q924t1 rattus norv
3	15	68.2	10	8	Q35013	Q35013 meloidogyne
4	15	68.2	14	8	Q8M099	Q8m099 tockus nasu
5	15	68.2	15	8	Q9XLJ8	Q9xlj8 grus leucog
6	15	68.2	15	8	Q9TH03	Q9th03 grus paradi
7	14	63.6	15	2	Q9R541	Q9r541 mycobacteri
8	13	59.1	11	2	Q9R446	Q9r446 neisseria g
9	12	54.5	8	13	P82079	P82079 limnodynast
10	12	54.5	9	6	Q8MJN1	Q8mjn1 cebuella py
11	12	54.5	9	6	Q8MJN6	Q8mjn6 aotus azara
12	12	54.5	9	6	Q8MJN8	Q8mjn8 cebus apell
13	12	54.5	9	6	Q8MJN2	Q8mjn2 callithrix
14	12	54.5	9	6	Q8MJN9	Q8mjn9 ateles fusc
15	12	54.5	9	6	Q8MJN5	Q8mjn5 saguinus fu
16	12	54.5	9	6	Q8MJN3	Q8mjn3 callimico g
17	12	54.5	9	6	Q8MJN7	Q8mjn7 saimiri sci
18	12	54.5	9	6	Q8MJN4	Q8mjn4 leontopithe
19	12	54.5	9	15	Q85599	Q85599 moloney mur
20	12	54.5	10	5	Q25356	Q25356 locusta mig
21	12	54.5	10	5	Q25355	Q25355 locusta mig
22	12	54.5	10	13	P82080	P82080 limnodynast
23	12	54.5	10	13	P82084	P82084 limnodynast
24	12	54.5	11	6	Q9TRX0	Q9trx0 sus scrofa
25	12	54.5	11	7	O77872	O77872 oreochromis
26	12	54.5	11	7	O77873	O77873 oreochromis
27	12	54.5	11	7	O77871	O77871 oreochromis
28	12	54.5	12	2	Q53183	Q53183 rhodococcus
29	12	54.5	12	2	Q93UU4	Q93uu4 escherichia
30	12	54.5	12	6	Q9N2B9	Q9n2b9 gorilla gor
31	12	54.5	12	6	Q9N2B8	Q9n2b8 pongo pygma
32	12	54.5	12	6	Q9N2C0	Q9n2c0 pan troglod
33	12	54.5	12	6	P83127	P83127 bos indicus
34	12	54.5	12	10	Q9SYT4	Q9sytt4 arabidopsis
35	12	54.5	12	10	Q02320	Q02320 pinus sylve
36	12	54.5	12	10	Q38715	Q38715 arachis hyp
37	12	54.5	12	10	Q02319	Q02319 pinus sylve
38	12	54.5	12	11	O54970	O54970 mus musculu
39	12	54.5	12	13	P82085	P82085 limnodynast
40	12	54.5	13	4	Q9UDE0	Q9ude0 homo sapien
41	12	54.5	13	4	Q96PI0	Q96pi0 homo sapien
42	12	54.5	13	5	Q9U5J2	Q9u5j2 trypanosoma
43	12	54.5	13	7	Q9TNQ8	Q9tnq8 homo sapien
44	12	54.5	13	13	P82848	P82848 rana pipien
45	12	54.5	14	2	P96350	P96350 legionella
46	12	54.5	14	4	Q8IWS6	Q8iws6 homo sapien
47	12	54.5	14	10	P82327	P82327 pisum sativ
48	12	54.5	14	12	Q8V1H7	Q8vlh7 hepatitis b
49	12	54.5	14	13	P82831	P82831 rana luteiv
50	12	54.5	14	13	P82832	P82832 rana luteiv
51	12	54.5	15	2	Q9X637	Q9x637 klebsiella
52	12	54.5	15	2	Q46013	Q46013 caulobacter
53	12	54.5	15	2	Q9X635	Q9x635 escherichia
54	12	54.5	15	4	Q9UQA5	Q9uqa5 homo sapien
55	12	54.5	15	4	Q9BXQ0	Q9bxq0 homo sapien
56	12	54.5	15	5	Q27266	Q27266 trypanosoma
57	12	54.5	15	6	Q8WNQ2	Q8wnq2 sus scrofa

## ALIGNMENTS

## RESULT 1

Q9UAR8

ID Q9UAR8 PRELIMINARY; PRT; 11 AA.  
 AC Q9UAR8;  
 DT 01-MAY-2000 (TrEMBLrel. 13, Created)  
 DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
 DE Sialokinin I preproprotein (Fragment).  
 OS Aedes aegypti (Yellowfever mosquito).  
 OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;  
 OC Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea; Aedes.  
 OX NCBI\_TaxID=7159;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=Rockefeller/Red; TISSUE=Salivary gland;  
 RX MEDLINE=20099025; PubMed=10620041;  
 RA Beerntsen B.T., Champagne D.E., Coleman J.L., Campos Y.A., James A.A.;  
 RT "Characterization of the Sialokinin I gene encoding the salivary  
 RT vasodilator of the yellow fever mosquito, Aedes aegypti.";  
 RL Insect Mol. Biol. 8:459-467(1999).  
 DR EMBL; AF108100; AAD16884.1; -.  
 DR GO; GO:0007268; P:synaptic transmission; IEA.  
 DR GO; GO:0007217; P:tachykinin signaling pathway; IEA.  
 DR InterPro; IPR002040; Tachy\_Neurokinin.  
 DR PROSITE; PS00267; TACHYKININ; 1.  
 FT NON\_TER 1 1  
 SQ SEQUENCE 11 AA; 1203 MW; 8BADC77C6B59C33A CRC64;

Query Match 90.9%; Score 20; DB 5; Length 11;  
 Best Local Similarity 80.0%; Pred. No. 96;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FXGLM 5  
 | |||  
 Db 6 FYGLM 10

Search completed: April 7, 2004, 09:26:16  
 Job time : 63 secs

OM protein - protein search, using sw model

Run on: April 7, 2004, 09:15:16 ; Search time 11 Seconds  
(without alignments)  
23.668 Million cell updates/sec

Title: US-10-030-388A-1  
Perfect score: 22  
Sequence: 1 FXGLM 5

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 141681 seqs, 52070155 residues

Total number of hits satisfying chosen parameters: 801

Minimum DB seq length: 0  
Maximum DB seq length: 15

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 1000 summaries

Database : SwissProt\_42:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result		%					
No.	Score	Query	Match	Length	DB	ID	Description
1	21	95.5	13	1	CP1	APLCA	Q10998 aplysia cal
2	20	90.9	10	1	TKN1	SCYCA	P08608 scyliorhinu
3	20	90.9	10	1	TKNB	CHICK	P19851 gallus gall
4	20	90.9	10	1	TKNB	ONCMY	P28500 oncorhynchu
5	20	90.9	10	1	TKNB	RANCA	P22689 rana catesb
6	20	90.9	10	1	TKNB	RANRI	P29135 rana ridibu
7	20	90.9	10	1	TKNC	RANCA	P22690 rana catesb
8	20	90.9	10	1	TKNK	PIG	P01292 sus scrofa
9	20	90.9	10	1	TKN	PHYBI	P08610 phyllomedus
10	20	90.9	10	1	TKS1	AEDAE	P42634 aedes aegyp
11	20	90.9	10	1	TKS2	AEDAE	P42635 aedes aegyp
12	20	90.9	11	1	TKN1	PSEGU	P42986 pseudophryn
13	20	90.9	11	1	TKN1	UPERU	P82026 uperoleia i
14	20	90.9	11	1	TKN1	UPERU	P08612 uperoleia r
15	20	90.9	11	1	TKN2	PSEGU	P42987 pseudophryn
16	20	90.9	11	1	TKN2	UPERU	P08616 uperoleia r
17	20	90.9	11	1	TKN3	PSEGU	P42988 pseudophryn



18	20	90.9	11	1	TKN4_PSEGU	P42989	pseudophryn
19	20	90.9	11	1	TKN5_PSEGU	P42990	pseudophryn
20	20	90.9	11	1	TKNA_CHICK	P19850	gallus gall
21	20	90.9	11	1	TKNA_GADMO	P28498	gadus morhu
22	20	90.9	11	1	TKNA_HORSE	P01290	equus cabal
23	20	90.9	11	1	TKNA_ONCMY	P28499	oncorhynchu
24	20	90.9	11	1	TKNA_RANCA	P22688	rana catesb
25	20	90.9	11	1	TKNA_RANRI	P29207	rana ridibu
26	20	90.9	11	1	TKNA_SCYCA	P41333	scyliorhinu
27	20	90.9	11	1	TKN_ELEMO	P01293	eledone mos
28	20	90.9	11	1	TKN_PHYFU	P08615	physalaemus
29	20	90.9	12	1	TKN1_KASMA	P08613	kassina mac
30	20	90.9	12	1	TKN_KASSE	P08611	kassina sen
31	20	90.9	14	1	TKNM_RANMA	P40951	rana margar
32	18	81.8	12	1	TKN2_KASMA	P08614	kassina mac
33	14	63.6	15	1	ATP2_PINPS	P81663	pinus pinas
34	13	59.1	9	1	TRP4_LEUMA	P81736	leucophaea
35	13	59.1	10	1	TRP6_LEUMA	P81738	leucophaea
36	13	59.1	10	1	TRP7_LEUMA	P81739	leucophaea
37	13	59.1	10	1	TRP8_LEUMA	P81740	leucophaea
38	13	59.1	10	1	TRP9_LEUMA	P81741	leucophaea
39	13	59.1	12	1	PA2B_VIPBO	P31859	vipera беру
40	13	59.1	15	1	R13A_SPIOL	P82454	spinacia ol
41	12	54.5	9	1	CCAP_CARMA	P38556	carcinus ma
42	12	54.5	9	1	FIBB_MACFU	P19345	macaca fusc
43	12	54.5	9	1	RE42_LITRU	P82075	litoria rub
44	12	54.5	9	1	TKC1_CALVO	P41517	calliphora
45	12	54.5	9	1	TKL1_LOCFI	P16223	locusta mig
46	12	54.5	10	1	CAER_LITXA	P56264	litoria xan
47	12	54.5	10	1	CU30_LOCFI	P11735	locusta mig
48	12	54.5	10	1	TKL2_LOCFI	P16224	locusta mig
49	12	54.5	10	1	TKL3_LOCFI	P30249	locusta mig
50	12	54.5	10	1	TKL4_LOCFI	P30250	locusta mig
51	12	54.5	10	1	TRP5_LEUMA	P81737	leucophaea
52	12	54.5	11	1	RE41_LITRU	P82074	litoria rub
53	12	54.5	11	1	TKC2_CALVO	P41518	calliphora
54	12	54.5	12	1	CD11_LITXA	P56245	litoria xan
55	12	54.5	12	1	CD14_LITXA	P56246	litoria xan
56	12	54.5	12	1	FRE1_LITIN	P82021	litoria inf
57	12	54.5	13	1	CD71_LITEW	P82051	litoria ewi
58	12	54.5	13	1	CHEP_PARID	P42718	parapolybia
59	12	54.5	13	1	CRBL_ICASP	P17237	icaria sp.
60	12	54.5	13	1	CRBL_VESAN	P17233	vespa anali
61	12	54.5	13	1	CRBL_VESLE	P17235	vespula lew
62	12	54.5	13	1	CRBL_VESMA	P17232	vespa manda
63	12	54.5	13	1	CRBL_VESTR	P17231	vespa tropi
64	12	54.5	13	1	CRBL_VESXA	P17234	vespa xanth
65	12	54.5	13	1	HPB9_RANES	P32416	rana escule
66	12	54.5	13	1	TEMC_RANTE	P56918	rana tempor
67	12	54.5	14	1	CRBL_VESOR	P17236	vespa orien
68	12	54.5	15	1	CDN2_LITGI	P56247	litoria gil
69	12	54.5	15	1	CDN4_LITCE	P82076	litoria cae
70	12	54.5	15	1	CDN5_LITCE	P82077	litoria cae
71	12	54.5	15	1	CDN6_LITCE	P82078	litoria cae
72	12	54.5	15	1	FRE2_LITIN	P82022	litoria inf
73	12	54.5	15	1	LEC1_PSOSC	P22582	psophocarpu
74	12	54.5	15	1	URE1_MORMO	P17337	morganelia

## ALIGNMENTS

## RESULT 1

CP1\_APLCA

ID CP1\_APLCA STANDARD; PRT; 13 AA.  
 AC Q10998;  
 DT 01-OCT-1996 (Rel. 34, Created)  
 DT 01-OCT-1996 (Rel. 34, Last sequence update)  
 DT 01-OCT-1996 (Rel. 34, Last annotation update)  
 DE Cerebral peptide 1 (CP1).  
 OS Aplysia californica (California sea hare).  
 OC Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;  
 OC Apogastropoda; Heterobranchia; Euthyneura; Opisthobranchia; Anaspidea;  
 OC Aplysioidea; Aplysiidae; Aplysia.  
 OX NCBI\_TaxID=6500;  
 RN [1]  
 RP SEQUENCE.  
 RC TISSUE=Ganglion;  
 RX MEDLINE=97001771; PubMed=8844763;  
 RA Phares G.A., Lloyd P.E.;  
 RT "Purification, primary structure, and neuronal localization of  
 RT cerebral peptide 1 from Aplysia."  
 RL Peptides 17:753-761(1996).  
 CC -!- FUNCTION: May function as a peptide transmitter.  
 CC -!- TISSUE SPECIFICITY: Found predominantly in the cerebral and pedal  
 CC ganglia.  
 SQ SEQUENCE 13 AA; 1314 MW; 9DBC3CE82C667B05 CRC64;

Query Match 95.5%; Score 21; DB 1; Length 13;  
 Best Local Similarity 80.0%; Pred. No. 8.8;  
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 FXGLM 5  
 | |||  
 Db 1 FSGLM 5

Search completed: April 7, 2004, 09:25:09  
 Job time : 20 secs

OM protein - protein search, using sw model

Run on: April 7, 2004, 09:23:37 ; Search time 21 Seconds  
(without alignments)  
22.903 Million cell updates/sec

Title: US-10-030-388A-1  
Perfect score: 22  
Sequence: 1 FXGLM 5

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283366 seqs, 96191526 residues

Total number of hits satisfying chosen parameters: 2522

Minimum DB seq length: 0  
Maximum DB seq length: 15

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 1000 summaries

Database : PIR\_78:\*  
1: pir1:\*  
2: pir2:\*  
3: pir3:\*  
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

RESULTS							
Result No.	% Query		Match	Length	DB	ID	Description
	Score						
1	20	90.9	10	1	SPPGNK	neuromedin K - pig	
2	20	90.9	10	2	JN0024	neurokinin A - chi	
3	20	90.9	10	2	A49581	sialokinin I - yel	
4	20	90.9	10	2	B49581	sialokinin II - ye	
5	20	90.9	10	2	A24867	scyliorhinin I - s	
6	20	90.9	10	2	S23307	neurokinin A - rai	
7	20	90.9	10	2	S23186	neurokinin A - Atl	
8	20	90.9	10	2	S07202	phyllomedulin - tw	
9	20	90.9	10	2	B61033	ranatachykinin B -	
10	20	90.9	10	2	C61033	ranatachykinin C -	
11	20	90.9	10	2	S27178	neurokinin A-relat	
12	20	90.9	11	1	SPHO	substance P - hors	
13	20	90.9	11	1	EOOCC	eledoisin - curled	

14	20	90.9	11	1	A60654	substance P - guin
15	20	90.9	11	1	EOOC	eledoisin - musky
16	20	90.9	11	2	JN0023	substance P - chic
17	20	90.9	11	2	D60409	kassinin-like pept
18	20	90.9	11	2	F60409	substance P-like p
19	20	90.9	11	2	E60409	substance P-like p
20	20	90.9	11	2	S23308	substance P - rain
21	20	90.9	11	2	S23306	substance P - Atla
22	20	90.9	11	2	B60409	kassinin-like pept
23	20	90.9	11	2	C60409	kassinin-like pept
24	20	90.9	11	2	S07203	uperolein - frog (
25	20	90.9	11	2	S07201	physalaemin - frog
26	20	90.9	11	2	A61033	ranatachykinin A -
27	20	90.9	11	2	S33300	probable substance
28	20	90.9	12	2	S10059	tachykinin - Afric
29	20	90.9	12	2	S07206	kassinin - Senegal
30	18	81.8	12	2	S07436	tachykinin - Afric
31	15	68.2	10	2	S19296	16K protein - poul
32	15	68.2	14	2	PA0096	pyruvate decarboxy
33	15	68.2	15	2	H56978	collagen alpha 1(X
34	14	63.6	11	2	PT0249	Ig heavy chain CRD
35	14	63.6	12	2	B46662	collagen alpha 2(V
36	14	63.6	15	2	S36893	ribosomal protein
37	13	59.1	5	2	A61445	Met-enkephalin - b
38	13	59.1	7	2	A60224	Met-enkephalin-Arg
39	13	59.1	9	2	PT0225	Ig heavy chain CDR
40	13	59.1	9	2	PD0027	pev-tachykinin - p
41	13	59.1	13	2	A32734	enkephalin precurs
42	13	59.1	15	2	A28497	neurotensin-relate
43	12	54.5	8	2	S13661	polygalacturonase
44	12	54.5	9	2	A61357	phyllocaerulein -
45	12	54.5	9	2	C24180	fibrinogen beta ch
46	12	54.5	9	2	A26363	cardioactive pepti
47	12	54.5	9	2	S39766	cardioactive pepti
48	12	54.5	9	2	S27233	cardioactive pepti
49	12	54.5	9	2	S10784	enamelin i - bovin
50	12	54.5	9	2	PH0942	T-cell receptor be
51	12	54.5	9	2	S39767	cardioactive pepti
52	12	54.5	10	1	ECLQ1M	tachykinin I - mig
53	12	54.5	10	1	ECLQ3M	tachykinin III - m
54	12	54.5	10	1	ECLQ4M	tachykinin IV - mi
55	12	54.5	10	2	A61337	caerulein - frog (
56	12	54.5	10	2	S68033	cytochrome P450 1A
57	12	54.5	10	2	A59173	nuclease Bh1 (EC 3
58	12	54.5	11	1	ECLQ2M	tachykinin II - mi
59	12	54.5	11	2	A35594	buccalin - Califor
60	12	54.5	12	2	S26558	T-cell receptor be
61	12	54.5	12	2	PS0213	28K protein 4412 -
62	12	54.5	12	2	S74144	aggrecan - bovine
63	12	54.5	12	2	PH1635	Ig H chain V-D-J r
64	12	54.5	12	2	S39762	cytochrome P450 UT
65	12	54.5	12	2	S23168	Z protein - guinea
66	12	54.5	13	2	S36874	cytochrome P450 CM
67	12	54.5	13	2	S09019	hemolytic protein
68	12	54.5	13	2	B56864	dipeptidyl-peptida
69	12	54.5	14	2	JN0390	histamine-releasin
70	12	54.5	14	2	S50900	chlorophyll a/b-bi

## ALIGNMENTS

## RESULT 1

SPPGNK

neuromedin K - pig

C;Species: Sus scrofa domestica (domestic pig)

C;Date: 19-Feb-1984 #sequence\_revision 19-Feb-1984 #text\_change 23-Aug-1996

C;Accession: A01560

R;Kangawa, K.; Minamino, N.; Fukuda, A.; Matsuo, H.

Biochem. Biophys. Res. Commun. 114, 533-540, 1983

A;Title: Neuromedin K: a novel mammalian tachykinin identified in porcine spinal cord.

A;Reference number: A01560; MUID:83282812; PMID:6576785

A;Accession: A01560

A;Molecule type: protein

A;Residues: 1-10 &lt;KAN&gt;

A;Note: the structure of the peptide was confirmed by synthesis

C;Comment: The biological source of this peptide is spinal cord. It stimulates smooth muscle contraction in mammalian assay systems, in a manner similar to that of substance P.

C;Superfamily: neurokinin B precursor

C;Keywords: amidated carboxyl end; hormone; spinal cord

F;10/Modified site: amidated carboxyl end (Met) #status experimental

Query Match 90.9%; Score 20; DB 1; Length 10;  
Best Local Similarity 80.0%; Pred. No. 25;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FXGLM 5  
| |||  
Db 6 FVGLM 10

## RESULT 2

JN0024

neurokinin A - chicken

C;Species: Gallus gallus (chicken)

C;Date: 07-Sep-1990 #sequence\_revision 07-Sep-1990 #text\_change 18-Aug-2000

C;Accession: JN0024

R;Conlon, J.M.; Katsoulis, S.; Schmidt, W.E.; Thim, L.

Regul. Pept. 20, 171-180, 1988

A;Title: [Arg3]substance P and neurokinin A from chicken small intestine.

A;Reference number: JN0023; MUID:88204263; PMID:2452461

A;Accession: JN0024

A;Molecule type: protein

A;Residues: 1-10 &lt;CON&gt;

C;Superfamily: substance P precursor

C;Keywords: amidated carboxyl end; neuropeptide; tachykinin

F;10/Modified site: amidated carboxyl end (Met) #status predicted

Query Match 90.9%; Score 20; DB 2; Length 10;  
Best Local Similarity 80.0%; Pred. No. 25;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FXGLM 5

Db            | | |  
              6 FVGLM 10

Search completed: April 7, 2004, 09:27:06  
Job time : 26 secs

OM protein - protein search, using sw model

Run on: April 7, 2004, 09:26:22 ; Search time 40 Seconds  
(without alignments)  
32.829 Million cell updates/sec

Title: US-10-030-388A-1  
Perfect score: 22  
Sequence: 1 FXGLM 5

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1071772 seqs, 262633353 residues

Total number of hits satisfying chosen parameters: 173463

Minimum DB seq length: 0  
Maximum DB seq length: 15

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 1000 summaries

Database : Published Applications\_AA:\*  
1: /cgn2\_6/ptodata/2/pubpaa/US07\_PUBCOMB.pep:\*  
2: /cgn2\_6/ptodata/2/pubpaa/PCT\_NEW\_PUB.pep:\*  
3: /cgn2\_6/ptodata/2/pubpaa/US06\_NEW\_PUB.pep:\*  
4: /cgn2\_6/ptodata/2/pubpaa/US06\_PUBCOMB.pep:\*  
5: /cgn2\_6/ptodata/2/pubpaa/US07\_NEW\_PUB.pep:\*  
6: /cgn2\_6/ptodata/2/pubpaa/PCTUS\_PUBCOMB.pep:\*  
7: /cgn2\_6/ptodata/2/pubpaa/US08\_NEW\_PUB.pep:\*  
8: /cgn2\_6/ptodata/2/pubpaa/US08\_PUBCOMB.pep:\*  
9: /cgn2\_6/ptodata/2/pubpaa/US09A\_PUBCOMB.pep:\*  
10: /cgn2\_6/ptodata/2/pubpaa/US09B\_PUBCOMB.pep:\*  
11: /cgn2\_6/ptodata/2/pubpaa/US09C\_PUBCOMB.pep:\*  
12: /cgn2\_6/ptodata/2/pubpaa/US09\_NEW\_PUB.pep:\*  
13: /cgn2\_6/ptodata/2/pubpaa/US10A\_PUBCOMB.pep:\*  
14: /cgn2\_6/ptodata/2/pubpaa/US10B\_PUBCOMB.pep:\*  
15: /cgn2\_6/ptodata/2/pubpaa/US10C\_PUBCOMB.pep:\*  
16: /cgn2\_6/ptodata/2/pubpaa/US10\_NEW\_PUB.pep:\*  
17: /cgn2\_6/ptodata/2/pubpaa/US60\_NEW\_PUB.pep:\*  
18: /cgn2\_6/ptodata/2/pubpaa/US60\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result	Query	
No.	Score Match Length DB ID	Description

1	21	95.5	12	14	US-10-172-425B-16	Sequence 16, Appl
2	20	90.9	5	14	US-10-230-133-4	Sequence 4, Appli
3	20	90.9	5	14	US-10-053-669-1	Sequence 1, Appli
4	20	90.9	5	14	US-10-053-669-4	Sequence 4, Appli
5	20	90.9	6	14	US-10-168-789A-38	Sequence 38, Appl
6	20	90.9	7	14	US-10-036-542-110	Sequence 110, App
7	20	90.9	7	14	US-10-036-542-111	Sequence 111, App
8	20	90.9	7	14	US-10-168-789A-37	Sequence 37, Appl
9	20	90.9	8	9	US-09-910-552-36	Sequence 36, Appl
10	20	90.9	8	14	US-10-168-789A-36	Sequence 36, Appl
11	20	90.9	9	14	US-10-036-542-112	Sequence 112, App
12	20	90.9	9	14	US-10-168-789A-35	Sequence 35, Appl
13	20	90.9	10	9	US-09-853-161-110	Sequence 110, App
14	20	90.9	10	9	US-09-852-659A-110	Sequence 110, App
15	20	90.9	10	9	US-09-852-797-110	Sequence 110, App
16	20	90.9	10	10	US-09-988-792-11	Sequence 11, Appl
17	20	90.9	10	12	US-10-445-400-1	Sequence 1, Appli
18	20	90.9	10	12	US-10-445-400-2	Sequence 2, Appli
19	20	90.9	10	14	US-10-197-954-98	Sequence 98, Appl
20	20	90.9	10	14	US-10-197-954-99	Sequence 99, Appl
21	20	90.9	10	14	US-10-168-789A-34	Sequence 34, Appl
22	20	90.9	10	14	US-10-267-918-1	Sequence 1, Appli
23	20	90.9	10	14	US-10-267-918-2	Sequence 2, Appli
24	20	90.9	10	15	US-10-360-101-91	Sequence 91, Appl
25	20	90.9	11	9	US-09-935-682-64	Sequence 64, Appl
26	20	90.9	11	10	US-09-988-792-1	Sequence 1, Appli
27	20	90.9	11	10	US-09-988-792-6	Sequence 6, Appli
28	20	90.9	11	10	US-09-988-792-7	Sequence 7, Appli
29	20	90.9	11	10	US-09-988-792-8	Sequence 8, Appli
30	20	90.9	11	10	US-09-988-792-9	Sequence 9, Appli
31	20	90.9	11	10	US-09-988-792-10	Sequence 10, Appl
32	20	90.9	11	12	US-09-841-091B-26	Sequence 26, Appl
33	20	90.9	11	13	US-10-002-593-4	Sequence 4, Appli
34	20	90.9	11	14	US-10-230-133-1	Sequence 1, Appli
35	20	90.9	11	14	US-10-053-669-3	Sequence 3, Appli
36	20	90.9	11	14	US-10-211-994-3	Sequence 3, Appli
37	20	90.9	11	14	US-10-114-823B-24	Sequence 24, Appl
38	20	90.9	11	14	US-10-197-954-48	Sequence 48, Appl
39	20	90.9	11	14	US-10-197-954-117	Sequence 117, App
40	20	90.9	11	14	US-10-197-954-130	Sequence 130, App
41	20	90.9	11	14	US-10-197-954-138	Sequence 138, App
42	20	90.9	11	14	US-10-251-703-25	Sequence 25, Appl
43	20	90.9	11	14	US-10-168-789A-17	Sequence 17, Appl
44	20	90.9	11	14	US-10-423-714-4	Sequence 4, Appli
45	20	90.9	11	15	US-10-289-009-24	Sequence 24, Appl
46	20	90.9	11	15	US-10-289-009-25	Sequence 25, Appl
47	20	90.9	11	15	US-10-289-009-26	Sequence 26, Appl
48	20	90.9	12	9	US-09-922-093-2	Sequence 2, Appli
49	20	90.9	12	9	US-09-922-093-5	Sequence 5, Appli
50	20	90.9	12	9	US-09-922-093-8	Sequence 8, Appli
51	20	90.9	12	9	US-09-938-112-2	Sequence 2, Appli
52	20	90.9	12	9	US-09-938-112-5	Sequence 5, Appli
53	20	90.9	12	9	US-09-938-112-8	Sequence 8, Appli
54	20	90.9	12	14	US-10-082-691-2	Sequence 2, Appli
55	20	90.9	12	14	US-10-082-691-5	Sequence 5, Appli
56	20	90.9	12	14	US-10-082-691-8	Sequence 8, Appli



57	20	90.9	12	14	US-10-050-200-55	Sequence 55, Appl
58	20	90.9	12	15	US-10-394-511-41	Sequence 41, Appl
59	20	90.9	13	9	US-09-922-093-3	Sequence 3, Appli
60	20	90.9	13	9	US-09-922-093-6	Sequence 6, Appli
61	20	90.9	13	9	US-09-922-093-9	Sequence 9, Appli
62	20	90.9	13	9	US-09-938-112-3	Sequence 3, Appli
63	20	90.9	13	9	US-09-938-112-6	Sequence 6, Appli
64	20	90.9	13	9	US-09-938-112-9	Sequence 9, Appli
65	20	90.9	13	14	US-10-082-691-3	Sequence 3, Appli
66	20	90.9	13	14	US-10-082-691-6	Sequence 6, Appli
67	20	90.9	13	14	US-10-082-691-9	Sequence 9, Appli
68	20	90.9	14	9	US-09-922-093-4	Sequence 4, Appli
69	20	90.9	14	9	US-09-922-093-7	Sequence 7, Appli
70	20	90.9	14	9	US-09-922-093-10	Sequence 10, Appl
71	20	90.9	14	9	US-09-938-112-4	Sequence 4, Appli
72	20	90.9	14	9	US-09-938-112-7	Sequence 7, Appli
73	20	90.9	14	9	US-09-938-112-10	Sequence 10, Appl
74	20	90.9	14	12	US-10-415-024-6	Sequence 6, Appli
75	20	90.9	14	14	US-10-131-543-6	Sequence 6, Appli
76	20	90.9	14	14	US-10-131-546-6	Sequence 6, Appli
77	20	90.9	14	14	US-10-131-346-6	Sequence 6, Appli
78	20	90.9	14	14	US-10-082-691-4	Sequence 4, Appli
79	20	90.9	14	14	US-10-082-691-7	Sequence 7, Appli
80	20	90.9	14	14	US-10-082-691-10	Sequence 10, Appl
81	20	90.9	15	9	US-09-853-161-109	Sequence 109, App
82	20	90.9	15	9	US-09-852-659A-109	Sequence 109, App
83	20	90.9	15	9	US-09-852-797-109	Sequence 109, App
84	19	86.4	14	9	US-09-838-050-10	Sequence 10, Appl
85	19	86.4	14	9	US-09-854-173A-10	Sequence 10, Appl
86	17	77.3	5	14	US-10-168-789A-32	Sequence 32, Appl
87	17	77.3	5	14	US-10-168-789A-39	Sequence 39, Appl
88	17	77.3	9	9	US-09-748-451-20	Sequence 20, Appl
89	17	77.3	9	15	US-10-285-394-127	Sequence 127, App
90	17	77.3	10	14	US-10-057-789-123	Sequence 123, App
91	17	77.3	10	14	US-10-212-628-123	Sequence 123, App
92	17	77.3	10	14	US-10-168-789A-26	Sequence 26, Appl
93	17	77.3	10	14	US-10-168-789A-27	Sequence 27, Appl
94	17	77.3	11	9	US-09-966-871-20	Sequence 20, Appl
95	17	77.3	11	12	US-10-458-860-20	Sequence 20, Appl
96	17	77.3	11	13	US-10-039-645-20	Sequence 20, Appl
97	17	77.3	11	14	US-10-139-084-20	Sequence 20, Appl
98	17	77.3	11	14	US-10-168-789A-25	Sequence 25, Appl
99	17	77.3	12	12	US-10-351-891-114	Sequence 114, App
100	17	77.3	12	14	US-10-168-789A-24	Sequence 24, Appl
101	17	77.3	13	14	US-10-168-789A-23	Sequence 23, Appl
102	17	77.3	14	14	US-10-168-789A-22	Sequence 22, Appl
103	17	77.3	15	10	US-09-563-222-139	Sequence 139, App
104	17	77.3	15	14	US-10-168-789A-28	Sequence 28, Appl
105	16	72.7	6	9	US-09-732-384-5	Sequence 5, Appli
106	16	72.7	6	13	US-10-008-355-24	Sequence 24, Appl
107	16	72.7	7	14	US-10-286-457-483	Sequence 483, App
108	16	72.7	8	14	US-10-194-441A-24	Sequence 24, Appl
109	16	72.7	9	9	US-09-894-018-299	Sequence 299, App
110	16	72.7	9	15	US-10-371-069-162	Sequence 162, App
111	16	72.7	9	15	US-10-371-645-162	Sequence 162, App
112	16	72.7	9	15	US-10-371-260-162	Sequence 162, App
113	16	72.7	10	9	US-09-848-967-31	Sequence 31, Appl

## ALIGNMENTS

## RESULT 1

US-10-172-425B-16

; Sequence 16, Application US/10172425B  
; Publication No. US20030147908A1  
; GENERAL INFORMATION:  
; APPLICANT: Kaempfer, Raymond  
; APPLICANT: Arad, Gila  
; TITLE OF INVENTION: BROAD SPECTRUM ANTAGONISTS AND VACCINES  
; TITLE OF INVENTION: DIRECTED AGAINST PYROGENIC EXOTOXINS  
; FILE REFERENCE: A31967-PCT-USA-A-A 066031.0164  
; CURRENT APPLICATION NUMBER: US/10/172,425B  
; CURRENT FILING DATE: 2002-06-13  
; PRIOR APPLICATION NUMBER: 09/150,947  
; PRIOR FILING DATE: 1998-09-10  
; PRIOR APPLICATION NUMBER: PCT/IL97/00438  
; PRIOR FILING DATE: 1997-12-30  
; PRIOR APPLICATION NUMBER: ISRAEL 119938  
; PRIOR FILING DATE: 1996-12-30  
; NUMBER OF SEQ ID NOS: 57  
; SOFTWARE: FastSEQ for Windows Version 4.0  
; SEQ ID NO 16  
; LENGTH: 12  
; TYPE: PRT  
; ORGANISM: Staphylococcus aureus  
US-10-172-425B-16

Query Match 95.5%; Score 21; DB 14; Length 12;  
Best Local Similarity 80.0%; Pred. No. 56;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FXGLM 5  
| |||  
Db 5 FTGLM 9

## RESULT 2

US-10-230-133-4

; Sequence 4, Application US/10230133  
; Publication No. US20030040625A1  
; GENERAL INFORMATION:  
; APPLICANT: Wells, Ibert  
; TITLE OF INVENTION: Antagonists of the magnesium binding defect as therapy agents and  
; TITLE OF INVENTION: methods for treatment of abnormal physiological states  
; FILE REFERENCE: 2892-106  
; CURRENT APPLICATION NUMBER: US/10/230,133  
; CURRENT FILING DATE: 2002-08-29  
; PRIOR APPLICATION NUMBER: 09/635,266  
; PRIOR FILING DATE: 2000-08-09  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 4  
; LENGTH: 5  
; TYPE: PRT

; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: MOD\_RES  
; LOCATION: (5)..(5)  
; OTHER INFORMATION: AMIDATION  
; FEATURE:  
; NAME/KEY: VARIANT  
; LOCATION: (2)..(2)  
; OTHER INFORMATION: "X" may be either F or V.  
US-10-230-133-4

Query Match 90.9%; Score 20; DB 14; Length 5;  
Best Local Similarity 100.0%; Pred. No. 9.7e+05;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FXGLM 5  
| | | | |  
Db 1 FXGLM 5

Search completed: April 7, 2004, 09:31:30  
Job time : 44 secs

OM protein - protein search, using sw model

Run on: April 7, 2004, 09:22:07 ; Search time 22 Seconds  
(without alignments)  
11.733 Million cell updates/sec

Title: US-10-030-388A-1  
Perfect score: 22  
Sequence: 1 FXGLM 5

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 146418

Minimum DB seq length: 0  
Maximum DB seq length: 15

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 1000 summaries

Database : Issued\_Patents\_AA:\*  
1: /cgn2\_6/ptodata/2/iaa/5A\_COMB.pep:\*  
2: /cgn2\_6/ptodata/2/iaa/5B\_COMB.pep:\*  
3: /cgn2\_6/ptodata/2/iaa/6A\_COMB.pep:\*  
4: /cgn2\_6/ptodata/2/iaa/6B\_COMB.pep:\*  
5: /cgn2\_6/ptodata/2/iaa/PCTUS\_COMB.pep:\*  
6: /cgn2\_6/ptodata/2/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

		%					
Result		Query					
No.	Score	Match	Length	DB	ID	Description	
1	20	90.9	5	1	US-07-753-909B-3	Sequence 3, Appli	
2	20	90.9	5	1	US-07-934-553-2	Sequence 2, Appli	
3	20	90.9	5	1	US-08-269-288-1	Sequence 1, Appli	
4	20	90.9	5	1	US-08-225-474-2	Sequence 2, Appli	
5	20	90.9	5	1	US-08-391-910-1	Sequence 1, Appli	
6	20	90.9	5	1	US-08-418-994-1	Sequence 1, Appli	
7	20	90.9	5	1	US-08-391-814-1	Sequence 1, Appli	
8	20	90.9	5	1	US-08-441-591-61	Sequence 61, Appl	
9	20	90.9	5	1	US-08-303-362A-61	Sequence 61, Appl	
10	20	90.9	5	1	US-08-462-415-1	Sequence 1, Appli	
11	20	90.9	5	1	US-08-463-874-1	Sequence 1, Appli	

12	20	90.9	5	1	US-08-444-135-1	Sequence 1, Appli
13	20	90.9	5	1	US-08-318-391-1	Sequence 1, Appli
14	20	90.9	5	2	US-07-737-371E-6	Sequence 6, Appli
15	20	90.9	5	3	US-08-257-966-1	Sequence 1, Appli
16	20	90.9	5	4	US-09-265-690C-1	Sequence 1, Appli
17	20	90.9	5	4	US-09-265-690C-4	Sequence 4, Appli
18	20	90.9	5	4	US-08-153-847-1	Sequence 1, Appli
19	20	90.9	5	4	US-09-635-266-4	Sequence 4, Appli
20	20	90.9	5	4	US-10-230-133-4	Sequence 4, Appli
21	20	90.9	5	5	PCT-US95-05600-78	Sequence 78, Appl
22	20	90.9	6	1	US-07-934-553-3	Sequence 3, Appli
23	20	90.9	6	1	US-08-225-474-3	Sequence 3, Appli
24	20	90.9	6	1	US-08-430-238-15	Sequence 15, Appl
25	20	90.9	6	2	US-07-737-371E-5	Sequence 5, Appli
26	20	90.9	6	2	US-07-737-371E-52	Sequence 52, Appl
27	20	90.9	6	3	US-09-317-125-5	Sequence 5, Appli
28	20	90.9	7	1	US-07-712-828B-7	Sequence 7, Appli
29	20	90.9	7	2	US-07-737-371E-8	Sequence 8, Appli
30	20	90.9	7	2	US-07-737-371E-51	Sequence 51, Appl
31	20	90.9	8	2	US-07-737-371E-10	Sequence 10, Appl
32	20	90.9	8	2	US-07-737-371E-56	Sequence 56, Appl
33	20	90.9	8	3	US-08-925-002-36	Sequence 36, Appl
34	20	90.9	8	4	US-09-910-552-36	Sequence 36, Appl
35	20	90.9	9	2	US-07-737-371E-60	Sequence 60, Appl
36	20	90.9	10	1	US-07-899-205-2	Sequence 2, Appli
37	20	90.9	10	1	US-07-899-205-3	Sequence 3, Appli
38	20	90.9	10	1	US-08-088-322-6	Sequence 6, Appli
39	20	90.9	10	1	US-08-193-393-1	Sequence 1, Appli
40	20	90.9	10	1	US-08-184-935-9	Sequence 9, Appli
41	20	90.9	10	1	US-08-184-935-10	Sequence 10, Appl
42	20	90.9	10	1	US-08-269-288-3	Sequence 3, Appli
43	20	90.9	10	1	US-08-269-288-4	Sequence 4, Appli
44	20	90.9	10	1	US-08-338-484-2	Sequence 2, Appli
45	20	90.9	10	1	US-08-338-484-3	Sequence 3, Appli
46	20	90.9	10	1	US-08-175-432-2	Sequence 2, Appli
47	20	90.9	10	1	US-08-175-432-3	Sequence 3, Appli
48	20	90.9	10	1	US-08-462-413-3	Sequence 3, Appli
49	20	90.9	10	1	US-08-462-413-4	Sequence 4, Appli
50	20	90.9	10	1	US-08-391-910-3	Sequence 3, Appli
51	20	90.9	10	1	US-08-391-910-4	Sequence 4, Appli
52	20	90.9	10	1	US-08-418-994-3	Sequence 3, Appli
53	20	90.9	10	1	US-08-418-994-4	Sequence 4, Appli
54	20	90.9	10	1	US-08-391-814-3	Sequence 3, Appli
55	20	90.9	10	1	US-08-391-814-4	Sequence 4, Appli
56	20	90.9	10	1	US-08-167-870-2	Sequence 2, Appli
57	20	90.9	10	1	US-08-167-870-3	Sequence 3, Appli
58	20	90.9	10	1	US-08-437-820-6	Sequence 6, Appli
59	20	90.9	10	1	US-08-462-415-3	Sequence 3, Appli
60	20	90.9	10	1	US-08-462-415-4	Sequence 4, Appli
61	20	90.9	10	1	US-08-463-874-3	Sequence 3, Appli
62	20	90.9	10	1	US-08-463-874-4	Sequence 4, Appli
63	20	90.9	10	1	US-08-318-391-3	Sequence 3, Appli
64	20	90.9	10	1	US-08-318-391-4	Sequence 4, Appli
65	20	90.9	10	2	US-08-496-118-2	Sequence 2, Appli
66	20	90.9	10	2	US-08-496-118-3	Sequence 3, Appli
67	20	90.9	10	2	US-07-737-371E-9	Sequence 9, Appli
68	20	90.9	10	2	US-07-737-371E-43	Sequence 43, Appl

69	20	90.9	10	2	US-07-737-371E-74	Sequence 74, Appl
70	20	90.9	10	2	US-07-737-371E-75	Sequence 75, Appl
71	20	90.9	10	3	US-08-257-966-3	Sequence 3, Appli
72	20	90.9	10	3	US-08-257-966-4	Sequence 4, Appli
73	20	90.9	10	3	US-09-168-548-2	Sequence 2, Appli
74	20	90.9	10	4	US-09-174-216-8	Sequence 8, Appli
75	20	90.9	10	4	US-08-153-847-3	Sequence 3, Appli
76	20	90.9	10	4	US-08-153-847-4	Sequence 4, Appli
77	20	90.9	10	4	US-09-152-060-110	Sequence 110, App
78	20	90.9	10	6	5169865-11	Patent No. 5169865
79	20	90.9	11	1	US-07-899-205-1	Sequence 1, Appli
80	20	90.9	11	1	US-07-753-909B-2	Sequence 2, Appli
81	20	90.9	11	1	US-07-934-553-1	Sequence 1, Appli
82	20	90.9	11	1	US-08-184-935-12	Sequence 12, Appl
83	20	90.9	11	1	US-08-269-288-2	Sequence 2, Appli
84	20	90.9	11	1	US-08-338-484-1	Sequence 1, Appli
85	20	90.9	11	1	US-08-175-432-1	Sequence 1, Appli
86	20	90.9	11	1	US-08-462-413-2	Sequence 2, Appli
87	20	90.9	11	1	US-08-225-474-1	Sequence 1, Appli
88	20	90.9	11	1	US-08-391-910-2	Sequence 2, Appli
89	20	90.9	11	1	US-08-418-994-2	Sequence 2, Appli
90	20	90.9	11	1	US-08-480-505-3	Sequence 3, Appli
91	20	90.9	11	1	US-08-391-814-2	Sequence 2, Appli
92	20	90.9	11	1	US-08-167-870-1	Sequence 1, Appli
93	20	90.9	11	1	US-08-428-488-15	Sequence 15, Appl
94	20	90.9	11	1	US-08-428-488-16	Sequence 16, Appl
95	20	90.9	11	1	US-08-428-488-17	Sequence 17, Appl
96	20	90.9	11	1	US-08-255-272-6	Sequence 6, Appli
97	20	90.9	11	1	US-08-441-591-6	Sequence 6, Appli
98	20	90.9	11	1	US-08-303-362A-6	Sequence 6, Appli
99	20	90.9	11	1	US-08-462-859A-1	Sequence 1, Appli
100	20	90.9	11	1	US-08-123-659A-1	Sequence 1, Appli
101	20	90.9	11	1	US-08-462-415-2	Sequence 2, Appli
102	20	90.9	11	1	US-08-463-874-2	Sequence 2, Appli
103	20	90.9	11	1	US-08-464-247A-1	Sequence 1, Appli
104	20	90.9	11	1	US-08-464-248A-1	Sequence 1, Appli
105	20	90.9	11	1	US-08-444-135-2	Sequence 2, Appli
106	20	90.9	11	1	US-08-318-391-2	Sequence 2, Appli
107	20	90.9	11	2	US-08-796-598-7	Sequence 7, Appli
108	20	90.9	11	2	US-08-796-598-11	Sequence 11, Appl
109	20	90.9	11	2	US-08-496-118-1	Sequence 1, Appli
110	20	90.9	11	2	US-08-447-175A-7	Sequence 7, Appli
111	20	90.9	11	2	US-08-447-175A-11	Sequence 11, Appl
112	20	90.9	11	2	US-07-737-371E-15	Sequence 15, Appl
113	20	90.9	11	2	US-07-737-371E-16	Sequence 16, Appl
114	20	90.9	11	2	US-07-737-371E-18	Sequence 18, Appl
115	20	90.9	11	2	US-07-737-371E-19	Sequence 19, Appl
116	20	90.9	11	2	US-07-737-371E-25	Sequence 25, Appl
117	20	90.9	11	2	US-07-737-371E-26	Sequence 26, Appl
118	20	90.9	11	2	US-07-737-371E-35	Sequence 35, Appl
119	20	90.9	11	2	US-07-737-371E-36	Sequence 36, Appl
120	20	90.9	11	2	US-07-737-371E-37	Sequence 37, Appl
121	20	90.9	11	2	US-07-737-371E-38	Sequence 38, Appl
122	20	90.9	11	2	US-07-737-371E-73	Sequence 73, Appl
123	20	90.9	11	2	US-07-737-371E-77	Sequence 77, Appl
124	20	90.9	11	2	US-08-848-766A-1	Sequence 1, Appli
125	20	90.9	11	3	US-08-890-157A-4	Sequence 4, Appli

126	20	90.9	11	3	US-08-927-128-17	Sequence 17, Appl
127	20	90.9	11	3	US-08-257-966-2	Sequence 2, Appli
128	20	90.9	11	3	US-09-214-614-1	Sequence 1, Appli
129	20	90.9	11	4	US-09-265-690C-3	Sequence 3, Appli
130	20	90.9	11	4	US-08-153-847-2	Sequence 2, Appli
131	20	90.9	11	4	US-09-635-266-1	Sequence 1, Appli
132	20	90.9	11	4	US-09-570-022-1	Sequence 1, Appli
133	20	90.9	11	4	US-09-570-022-5	Sequence 5, Appli
134	20	90.9	11	4	US-09-570-022-6	Sequence 6, Appli
135	20	90.9	11	4	US-09-570-022-10	Sequence 10, Appl
136	20	90.9	11	4	US-10-002-593-4	Sequence 4, Appli
137	20	90.9	11	4	US-09-629-642A-1	Sequence 1, Appli
138	20	90.9	11	4	US-10-230-133-1	Sequence 1, Appli
139	20	90.9	11	5	PCT-US92-06532-1	Sequence 1, Appli
140	20	90.9	11	5	PCT-US95-05600-23	Sequence 23, Appl
141	20	90.9	11	6	5441935-1	Patent No. 5441935
142	20	90.9	12	1	US-08-428-488-18	Sequence 18, Appl
143	20	90.9	12	1	US-08-441-591-7	Sequence 7, Appli
144	20	90.9	12	1	US-08-303-362A-7	Sequence 7, Appli
145	20	90.9	12	2	US-08-796-598-10	Sequence 10, Appl
146	20	90.9	12	2	US-08-447-175A-10	Sequence 10, Appl
147	20	90.9	12	2	US-07-737-371E-76	Sequence 76, Appl
148	20	90.9	12	3	US-08-505-250-27	Sequence 27, Appl
149	20	90.9	12	3	US-08-505-250-53	Sequence 53, Appl
150	20	90.9	12	4	US-09-264-709A-16	Sequence 16, Appl
151	20	90.9	12	4	US-08-505-250-27	Sequence 27, Appl
152	20	90.9	12	4	US-08-505-250-53	Sequence 53, Appl
153	20	90.9	12	4	US-09-922-093-2	Sequence 2, Appli
154	20	90.9	12	4	US-09-922-093-5	Sequence 5, Appli
155	20	90.9	12	4	US-09-922-093-8	Sequence 8, Appli
156	20	90.9	12	4	US-09-403-752A-41	Sequence 41, Appl
157	20	90.9	12	4	US-09-763-669-1	Sequence 1, Appli
158	20	90.9	12	4	US-09-763-669-2	Sequence 2, Appli
159	20	90.9	12	4	US-09-625-098F-2	Sequence 2, Appli
160	20	90.9	12	4	US-09-625-098F-5	Sequence 5, Appli
161	20	90.9	12	4	US-09-625-098F-8	Sequence 8, Appli
162	20	90.9	12	5	PCT-US92-06532-4	Sequence 4, Appli
163	20	90.9	12	5	PCT-US95-05600-24	Sequence 24, Appl
164	20	90.9	13	1	US-07-712-828B-5	Sequence 5, Appli
165	20	90.9	13	2	US-07-737-371E-46	Sequence 46, Appl
166	20	90.9	13	4	US-09-922-093-3	Sequence 3, Appli
167	20	90.9	13	4	US-09-922-093-6	Sequence 6, Appli
168	20	90.9	13	4	US-09-922-093-9	Sequence 9, Appli
169	20	90.9	13	4	US-09-625-098F-3	Sequence 3, Appli
170	20	90.9	13	4	US-09-625-098F-6	Sequence 6, Appli
171	20	90.9	13	4	US-09-625-098F-9	Sequence 9, Appli
172	20	90.9	14	4	US-09-922-093-4	Sequence 4, Appli
173	20	90.9	14	4	US-09-922-093-7	Sequence 7, Appli
174	20	90.9	14	4	US-09-922-093-10	Sequence 10, Appl
175	20	90.9	14	4	US-09-625-098F-4	Sequence 4, Appli
176	20	90.9	14	4	US-09-625-098F-7	Sequence 7, Appli
177	20	90.9	14	4	US-09-625-098F-10	Sequence 10, Appl
178	20	90.9	15	4	US-09-152-060-109	Sequence 109, App
179	19	86.4	10	2	US-07-737-371E-42	Sequence 42, Appl
180	19	86.4	10	2	US-07-737-371E-44	Sequence 44, Appl
181	19	86.4	11	2	US-07-737-371E-33	Sequence 33, Appl
182	19	86.4	11	4	US-09-570-022-7	Sequence 7, Appli

183	19	86.4	11	4	US-09-570-022-8	Sequence 8, Appli
184	19	86.4	11	4	US-09-570-022-9	Sequence 9, Appli
185	19	86.4	14	3	US-08-869-285-10	Sequence 10, Appl
186	19	86.4	14	3	US-09-255-533-10	Sequence 10, Appl
187	17	77.3	5	2	US-07-737-371E-48	Sequence 48, Appl
188	17	77.3	6	3	US-08-987-743-13	Sequence 13, Appl
189	17	77.3	9	3	US-09-061-702-20	Sequence 20, Appl
190	17	77.3	10	1	US-08-299-285-21	Sequence 21, Appl
191	17	77.3	10	2	US-08-985-126-21	Sequence 21, Appl
192	17	77.3	10	4	US-09-358-020-21	Sequence 21, Appl
193	17	77.3	10	5	PCT-US95-11126-21	Sequence 21, Appl
194	17	77.3	11	2	US-07-737-371E-12	Sequence 12, Appl
195	17	77.3	14	1	US-07-908-317-17	Sequence 17, Appl
196	17	77.3	14	5	PCT-US93-06171-17	Sequence 17, Appl
197	17	77.3	15	5	PCT-US94-06655-4	Sequence 4, Appli
198	16	72.7	6	1	US-08-277-660A-3	Sequence 3, Appli
199	16	72.7	6	1	US-08-424-957-3	Sequence 3, Appli
200	16	72.7	6	3	US-09-035-686-3	Sequence 3, Appli
201	16	72.7	8	1	US-07-920-519-9	Sequence 9, Appli
202	16	72.7	8	1	US-08-086-410-6	Sequence 6, Appli
203	16	72.7	8	1	US-08-314-586-9	Sequence 9, Appli
204	16	72.7	8	3	US-08-444-818-431	Sequence 431, App
205	16	72.7	8	3	US-08-444-818-432	Sequence 432, App
206	16	72.7	9	3	US-08-159-339A-337	Sequence 337, App
207	16	72.7	9	3	US-08-159-339A-824	Sequence 824, App
208	16	72.7	9	4	US-09-311-784A-162	Sequence 162, App
209	16	72.7	10	1	US-08-277-660A-8	Sequence 8, Appli
210	16	72.7	10	1	US-08-424-957-12	Sequence 12, Appl
211	16	72.7	10	3	US-08-159-339A-854	Sequence 854, App
212	16	72.7	10	3	US-09-035-686-12	Sequence 12, Appl
213	16	72.7	11	4	US-09-462-951B-8	Sequence 8, Appli
214	16	72.7	12	2	US-08-764-640-128	Sequence 128, App
215	16	72.7	12	2	US-08-553-257A-25	Sequence 25, Appl
216	16	72.7	12	2	US-08-553-257A-27	Sequence 27, Appl
217	16	72.7	12	2	US-08-553-257A-28	Sequence 28, Appl
218	16	72.7	12	2	US-08-553-257A-29	Sequence 29, Appl
219	16	72.7	12	2	US-08-553-257A-30	Sequence 30, Appl
220	16	72.7	12	3	US-08-973-225-128	Sequence 128, App
221	16	72.7	12	3	US-09-244-298A-128	Sequence 128, App
222	16	72.7	12	3	US-09-516-704-128	Sequence 128, App
223	16	72.7	12	4	US-09-549-090-128	Sequence 128, App
224	16	72.7	12	4	US-09-832-230A-128	Sequence 128, App
225	16	72.7	12	4	US-09-441-992-25	Sequence 25, Appl
226	16	72.7	12	4	US-09-441-992-27	Sequence 27, Appl
227	16	72.7	12	4	US-09-441-992-28	Sequence 28, Appl
228	16	72.7	12	4	US-09-441-992-29	Sequence 29, Appl
229	16	72.7	12	4	US-09-441-992-30	Sequence 30, Appl
230	16	72.7	12	4	US-09-428-082B-50	Sequence 50, Appl
231	16	72.7	13	4	US-09-385-740B-14	Sequence 14, Appl
232	16	72.7	13	4	US-10-073-679-14	Sequence 14, Appl
233	16	72.7	13	4	US-10-009-999A-14	Sequence 14, Appl
234	16	72.7	14	3	US-09-335-098A-4	Sequence 4, Appli
235	16	72.7	14	4	US-09-385-740B-4	Sequence 4, Appli
236	16	72.7	14	4	US-10-073-679-4	Sequence 4, Appli
237	16	72.7	14	4	US-10-009-999A-4	Sequence 4, Appli
238	16	72.7	15	1	US-08-277-660A-5	Sequence 5, Appli
239	16	72.7	15	1	US-08-277-660A-6	Sequence 6, Appli



## ALIGNMENTS

## RESULT 1

US-07-753-909B-3

; Sequence 3, Application US/07753909B

; Patent No. 5304632

; GENERAL INFORMATION:

; APPLICANT: Vaudry, Hubert

; APPLICANT: Conlon, Michael J.

; TITLE OF INVENTION: Neuropeptides of the Tachykinin Family

; NUMBER OF SEQUENCES: 3

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Zarley, McKee, Thomte, Voorhees, and Sease

; STREET: 801 Grand, Suite 3200

; CITY: Des Moines

; STATE: Iowa

; COUNTRY: United States

; ZIP: 50309

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/07/753,909B

; FILING DATE: 19910903

; CLASSIFICATION: 530

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: FR 9106759

; FILING DATE: 04-JUN-1991

; ATTORNEY/AGENT INFORMATION:

; NAME: Sease, Edmund J.

; REGISTRATION NUMBER: 24,741

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (515)-288-3667

; TELEFAX: (515)-288-1338

; INFORMATION FOR SEQ ID NO: 3:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 5 amino acids

; TYPE: AMINO ACID

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; FRAGMENT TYPE: C-terminal

; ORIGINAL SOURCE:

; ORGANISM: Rana ridibunda

; DEVELOPMENTAL STAGE: adult

; TISSUE TYPE: brain

US-07-753-909B-3

Query Match 90.9%; Score 20; DB 1; Length 5;

Best Local Similarity 100.0%; Pred. No. 3e+05;

Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FXGLM 5

Db                   |||||  
                    1 FXGLM 5

RESULT 2  
US-07-934-553-2  
; Sequence 2, Application US/07934553  
; Patent No. 5314690  
; GENERAL INFORMATION:  
; APPLICANT: PATTERSON, ROY  
; APPLICANT: HARRIS, KATHLEEN E  
; TITLE OF INVENTION: METHOD AND COMPOSITION FOR REDUCING IgE  
; TITLE OF INVENTION: ANTIBODIES TO SPECIFIC ALLERGENS  
; NUMBER OF SEQUENCES: 5  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: TILTON, FALLON, LUNG MUS & CHESTNUT  
; STREET: 100 SOUTH WACKER DRIVE  
; CITY: CHICAGO  
; STATE: ILLINOIS  
; COUNTRY: USA  
; ZIP: 60606-4002  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/07/934,553  
; FILING DATE: 19920821  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/705,071  
; FILING DATE: 24-MAY-1991  
; ATTORNEY/AGENT INFORMATION:  
; NAME: FENTRESS, SUSAN B  
; REGISTRATION NUMBER: 31,327  
; REFERENCE/DOCKET NUMBER: NU-9033CIP  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 312/456-8000  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 5 amino acids  
; TYPE: AMINO ACID  
; STRANDEDNESS: unknown  
; TOPOLOGY: unknown  
; MOLECULE TYPE: peptide  
US-07-934-553-2

Query Match                   90.9%; Score 20; DB 1; Length 5;  
Best Local Similarity       80.0%; Pred. No. 3e+05;  
Matches       4; Conservative   0; Mismatches   1; Indels       0; Gaps       0;  
Qy            1 FXGLM 5  
              | |||  
Db            1 FFGLM 5  
Search completed: April 7, 2004, 09:26:37  
Job time : 32 secs

OM protein - protein search, using sw model

Run on: April 7, 2004, 09:14:31 ; Search time 53 Seconds  
(without alignments)  
26.655 Million cell updates/sec

Title: US-10-030-388A-1  
Perfect score: 22  
Sequence: 1 FXGLM 5

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 447529

Minimum DB seq length: 0  
Maximum DB seq length: 15

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 1000 summaries

Database : A\_Geneseq\_29Jan04:\*  
1: geneseqp1980s:\*  
2: geneseqp1990s:\*  
3: geneseqp2000s:\*  
4: geneseqp2001s:\*  
5: geneseqp2002s:\*  
6: geneseqp2003as:\*  
7: geneseqp2003bs:\*  
8: geneseqp2004s:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query		DB	ID	Description
		Match	Length			
1	21	95.5	12	2	AAW64648	Aaw64648 Synthetic
2	21	95.5	14	4	AAM97765	Aam97765 Human pep
3	20	90.9	5	2	AAR33009	Aar33009 Alpha-sub
4	20	90.9	5	2	AAR33008	Aar33008 Alpha-sub
5	20	90.9	5	2	AAR33007	Aar33007 Alpha-sub
6	20	90.9	5	2	AAR33010	Aar33010 Alpha-sub
7	20	90.9	5	2	AAW80134	Aaw80134 COOH-term
8	20	90.9	5	2	AAR54549	Aar54549 Cholecyst
9	20	90.9	5	2	AAR54551	Aar54551 Cholecyst

10	20	90.9	5	2	AAR54550	Aar54550	Cholecyst
11	20	90.9	5	2	AAR54548	Aar54548	Cholecyst
12	20	90.9	5	2	AAW41687	Aaw41687	Tetrapept
13	20	90.9	5	2	AAW99643	Aaw99643	Substance
14	20	90.9	5	2	AAW50325	Aay50325	Neutrophil
15	20	90.9	5	2	AAW92660	Aaw92660	Human tac
16	20	90.9	5	3	AAB23028	Aab23028	Mammalian
17	20	90.9	5	3	AAB23025	Aab23025	Human/rat
18	20	90.9	5	3	AAW67576	Aay67576	P antagon
19	20	90.9	5	4	AAB66674	Aab66674	C-termina
20	20	90.9	5	4	AAB82430	Aab82430	Fluorinat
21	20	90.9	5	4	AAB82431	Aab82431	Fluorinat
22	20	90.9	5	4	AAB91428	Aab91428	Tachykini
23	20	90.9	5	4	AAB70556	Aab70556	Octopus t
24	20	90.9	5	5	AAU10880	Aau10880	Human bet
25	20	90.9	5	5	ABB10088	Abb10088	Substance
26	20	90.9	5	5	AAU77847	Aau77847	Tachykini
27	20	90.9	5	5	AAU77845	Aau77845	Tachykini
28	20	90.9	5	7	ADC64000	Adc64000	Tachykini
29	20	90.9	6	1	AAP30443	Aap30443	Sequence
30	20	90.9	6	1	AAP40519	Aap40519	Sequence
31	20	90.9	6	1	AAP50694	Aap50694	Sequence
32	20	90.9	6	1	AAP50632	Aap50632	Substance
33	20	90.9	6	1	AAP61486	Aap61486	Peptide h
34	20	90.9	6	2	AAR07897	Aar07897	Cylcopept
35	20	90.9	6	2	AAR07893	Aar07893	Cylcopept
36	20	90.9	6	2	AAR21959	Aar21959	Substance
37	20	90.9	6	2	AAR27696	Aar27696	Cyclic ta
38	20	90.9	6	2	AAR27694	Aar27694	Cyclic ta
39	20	90.9	6	2	AAR27695	Aar27695	Cyclic ta
40	20	90.9	6	2	AAW99686	Aaw99686	Substance
41	20	90.9	6	2	AAW92706	Aaw92706	Human tac
42	20	90.9	6	2	AAW92659	Aaw92659	Human tac
43	20	90.9	6	2	AAW31052	Aay31052	Non-cross
44	20	90.9	6	3	AAW67575	Aay67575	P antagon
45	20	90.9	6	4	AAB82453	Aab82453	Fluorinat
46	20	90.9	6	4	AAB82432	Aab82432	Fluorinat
47	20	90.9	6	4	AAB82436	Aab82436	Fluorinat
48	20	90.9	6	4	AAB82433	Aab82433	Fluorinat
49	20	90.9	6	4	AAB91421	Aab91421	Tachykini
50	20	90.9	6	4	AAB91425	Aab91425	Tachykini
51	20	90.9	6	4	AAB91419	Aab91419	Tachykini
52	20	90.9	6	4	AAG99351	Aag99351	Atypical
53	20	90.9	6	4	AAB74306	Aab74306	Peptide a
54	20	90.9	6	4	AAB98884	Aab98884	Chimeric
55	20	90.9	6	4	AAB98886	Aab98886	Chimeric
56	20	90.9	6	5	ABB10087	Abb10087	Substance
57	20	90.9	6	5	ABB10086	Abb10086	Substance
58	20	90.9	6	6	ABJ37288	Abj37288	Rhodopsin
59	20	90.9	7	1	AAP20310	Aap20310	Tyr8-SP5-
60	20	90.9	7	2	AAR21956	Aar21956	Substance
61	20	90.9	7	2	AAR21957	Aar21957	Substance
62	20	90.9	7	2	AAW29539	Aaw29539	Asp-Ser-P
63	20	90.9	7	2	AAW50324	Aay50324	Neutrophil
64	20	90.9	7	2	AAW92662	Aaw92662	Human tac
65	20	90.9	7	2	AAW92705	Aaw92705	Human tac
66	20	90.9	7	3	AAW67574	Aay67574	P antagon

67	20	90.9	7	4	AAB80323	Aab80323	Human pro
68	20	90.9	7	4	AAB80324	Aab80324	Human pro
69	20	90.9	7	4	AAB82428	Aab82428	Fluorinat
70	20	90.9	7	4	AAB82429	Aab82429	Fluorinat
71	20	90.9	7	4	AAB91354	Aab91354	Tachykini
72	20	90.9	7	4	AAB91431	Aab91431	Tachykini
73	20	90.9	7	4	AAB91420	Aab91420	Tachykini
74	20	90.9	7	4	AAG99350	Aag99350	Atypical
75	20	90.9	7	4	AAB98845	Aab98845	Chimeric
76	20	90.9	7	5	ABB10085	Abb10085	Substance
77	20	90.9	7	5	ABB09500	Abb09500	Substance
78	20	90.9	8	1	AAP20303	Aap20303	Gastroint
79	20	90.9	8	2	AAR28444	Aar28444	Neurokini
80	20	90.9	8	2	AAW57536	Aaw57536	Molecular
81	20	90.9	8	2	AAW92664	Aaw92664	Human tac
82	20	90.9	8	2	AAW92710	Aaw92710	Human tac
83	20	90.9	8	3	AAV67573	Aay67573	P antagon
84	20	90.9	8	4	AAB91407	Aab91407	Tachykini
85	20	90.9	8	4	AAB91416	Aab91416	Tachykini
86	20	90.9	8	4	AAB91424	Aab91424	Tachykini
87	20	90.9	8	4	AAG99349	Aag99349	Atypical
88	20	90.9	8	4	AAB97571	Aab97571	Substitut
89	20	90.9	8	5	ABB09498	Abb09498	Substance
90	20	90.9	8	5	ABB09499	Abb09499	Substance
91	20	90.9	9	1	AAP50634	Aap50634	Substance
92	20	90.9	9	2	AAW92714	Aaw92714	Human tac
93	20	90.9	9	4	AAB80325	Aab80325	Human pro
94	20	90.9	9	4	AAB91446	Aab91446	Tachykini
95	20	90.9	9	4	AAB91369	Aab91369	Tachykini
96	20	90.9	9	4	AAG99348	Aag99348	Atypical
97	20	90.9	10	1	AAP40414	Aap40414	Decapepti
98	20	90.9	10	1	AAP40413	Aap40413	Decapepti
99	20	90.9	10	1	AAP50633	Aap50633	Substance
100	20	90.9	10	2	AAR21933	Aar21933	Substance
101	20	90.9	10	2	AAR65181	Aar65181	S. cerevi
102	20	90.9	10	2	AAR77311	Aar77311	Neurokini
103	20	90.9	10	2	AAR77312	Aar77312	Neurokini
104	20	90.9	10	2	AAW79777	Aaw79777	Neurokini
105	20	90.9	10	2	AAW79776	Aaw79776	Neurokini
106	20	90.9	10	2	AAW48951	Aaw48951	Tachykini
107	20	90.9	10	2	AAW75251	Aaw75251	Fragment
108	20	90.9	10	2	AAW74415	Aaw74415	HPMBQ91 p
109	20	90.9	10	2	AAV23264	Aay23264	Protein b
110	20	90.9	10	2	AAV06939	Aay06939	Substance
111	20	90.9	10	2	AAW92663	Aaw92663	Human tac
112	20	90.9	10	2	AAW92697	Aaw92697	Human tac
113	20	90.9	10	2	AAW92729	Aaw92729	Human tac
114	20	90.9	10	2	AAW92728	Aaw92728	Human tac
115	20	90.9	10	4	AAB82417	Aab82417	Neurokini
116	20	90.9	10	4	AAB91383	Aab91383	Tachykini
117	20	90.9	10	4	AAB91398	Aab91398	Tachykini
118	20	90.9	10	4	AAB91355	Aab91355	Tachykini
119	20	90.9	10	4	AAB91397	Aab91397	Tachykini
120	20	90.9	10	4	AAB91368	Aab91368	Tachykini
121	20	90.9	10	4	AAB91445	Aab91445	Tachykini
122	20	90.9	10	4	AAB91356	Aab91356	Tachykini
123	20	90.9	10	4	AAG99355	Aag99355	Neurokini

124	20	90.9	10	4	AAG99356	Aag99356	Neurokini
125	20	90.9	10	4	AAG99347	Aag99347	Atypical
126	20	90.9	10	4	AAG64746	Aag64746	Substance
127	20	90.9	10	4	AAB82381	Aab82381	Human neu
128	20	90.9	10	5	AAE27017	Aae27017	Human gen
129	20	90.9	10	5	AAE27155	Aae27155	Human gen
130	20	90.9	10	5	ABB99004	Abb99004	Neurokini
131	20	90.9	10	5	ABB99003	Abb99003	Neurokini
132	20	90.9	10	6	ABG76074	Abg76074	Sea lampr
133	20	90.9	10	6	ABU65028	Abu65028	Human sec
134	20	90.9	10	7	ADC63999	Adc63999	Mosquito
135	20	90.9	10	7	ADC63998	Adc63998	Mosquito
136	20	90.9	11	1	AAP50425	Aap50425	Hypotensi
137	20	90.9	11	1	AAP61480	Aap61480	Sequence
138	20	90.9	11	1	AAP80312	Aap80312	Sequence
139	20	90.9	11	2	AAR11854	Aar11854	Undecapep
140	20	90.9	11	2	AAR13162	Aar13162	Sialic ac
141	20	90.9	11	2	AAR28445	Aar28445	Neurokini
142	20	90.9	11	2	AAR28442	Aar28442	Substance
143	20	90.9	11	2	AAR21971	Aar21971	Cyclic su
144	20	90.9	11	2	AAR21942	Aar21942	Substance
145	20	90.9	11	2	AAR21962	Aar21962	Substance
146	20	90.9	11	2	AAR21945	Aar21945	Substance
147	20	90.9	11	2	AAR21963	Aar21963	Substance
148	20	90.9	11	2	AAR21949	Aar21949	Substance
149	20	90.9	11	2	AAR21951	Aar21951	Substance
150	20	90.9	11	2	AAR21946	Aar21946	Substance
151	20	90.9	11	2	AAR21964	Aar21964	Substance
152	20	90.9	11	2	AAR21972	Aar21972	Cyclic su
153	20	90.9	11	2	AAR21970	Aar21970	Cyclic su
154	20	90.9	11	2	AAR21938	Aar21938	Substance
155	20	90.9	11	2	AAR21941	Aar21941	Substance
156	20	90.9	11	2	AAR21939	Aar21939	Substance
157	20	90.9	11	2	AAR21954	Aar21954	Substance
158	20	90.9	11	2	AAR42646	Aar42646	Neurokini
159	20	90.9	11	2	AAR42649	Aar42649	Neurokini
160	20	90.9	11	2	AAR32183	Aar32183	Ranakinin
161	20	90.9	11	2	AAR32182	Aar32182	Generic n
162	20	90.9	11	2	AAR85243	Aar85243	Substance
163	20	90.9	11	2	AAR77109	Aar77109	Uperoleia
164	20	90.9	11	2	AAR77310	Aar77310	Substance
165	20	90.9	11	2	AAW33181	Aaw33181	Mono-DTPA
166	20	90.9	11	2	AAW33180	Aaw33180	Mono-DTPA
167	20	90.9	11	2	AAW04616	Aaw04616	Substance
168	20	90.9	11	2	AAW04613	Aaw04613	Physalaem
169	20	90.9	11	2	AAW79775	Aaw79775	Substance
170	20	90.9	11	2	AAW42973	Aaw42973	Substrate
171	20	90.9	11	2	AAW48950	Aaw48950	Tachykini
172	20	90.9	11	2	AAW48280	Aaw48280	Tyrosylpe
173	20	90.9	11	2	AAW79663	Aaw79663	Substance
174	20	90.9	11	2	AAW79662	Aaw79662	Substance
175	20	90.9	11	2	AAW92679	Aaw92679	Human tac
176	20	90.9	11	2	AAW92676	Aaw92676	Human tac
177	20	90.9	11	2	AAW92720	Aaw92720	Human tac
178	20	90.9	11	2	AAW92673	Aaw92673	Human tac
179	20	90.9	11	2	AAW92708	Aaw92708	Human tac
180	20	90.9	11	2	AAW92731	Aaw92731	Human tac

181	20	90.9	11	2	AAW92670	Aaw92670	Human	tac
182	20	90.9	11	2	AAW92689	Aaw92689	Human	tac
183	20	90.9	11	2	AAW92715	Aaw92715	Human	tac
184	20	90.9	11	2	AAW92719	Aaw92719	Human	tac
185	20	90.9	11	2	AAW92727	Aaw92727	Human	tac
186	20	90.9	11	2	AAW92680	Aaw92680	Human	tac
187	20	90.9	11	2	AAW92692	Aaw92692	Human	tac
188	20	90.9	11	2	AAW92681	Aaw92681	Human	tac
189	20	90.9	11	2	AAW92669	Aaw92669	Human	tac
190	20	90.9	11	2	AAW92691	Aaw92691	Human	tac
191	20	90.9	11	2	AAW92672	Aaw92672	Human	tac
192	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
193	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
194	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
195	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
196	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
197	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
198	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
199	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
200	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
201	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
202	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
203	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
204	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
205	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
206	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
207	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
208	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
209	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
210	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
211	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
212	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
213	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
214	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
215	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
216	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
217	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
218	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
219	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
220	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
221	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
222	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
223	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
224	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
225	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
226	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
227	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
228	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
229	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
230	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
231	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
232	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
233	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
234	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
235	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
236	20	90.9	11	2	AAW92690	Aaw92690	Human	tac
237	20	90.9	11	2	AAW92690	Aaw92690	Human	tac

238	20	90.9	11	5	ABB09842	Abb09842	Amino aci
239	20	90.9	11	6	ABP72531	Abp72531	Substance
240	20	90.9	11	6	ABG76071	Abg76071	Chicken a
241	20	90.9	11	6	ABG76064	Abg76064	Human tac
242	20	90.9	11	6	ABG76073	Abg76073	Rainbow t
243	20	90.9	11	6	ABG76069	Abg76069	Spotted d
244	20	90.9	11	6	ABG76070	Abg76070	Guinea pi
245	20	90.9	11	6	ABG76072	Abg76072	Atlantic
246	20	90.9	11	7	ADD69983	Add69983	Primate n
247	20	90.9	11	7	ABR83030	Abr83030	Substance
248	20	90.9	12	2	AAR32798	Aar32798	Tyr-1 sub
249	20	90.9	12	2	AAR85244	Aar85244	Substance
250	20	90.9	12	2	AAW04615	Aaw04615	Kassinin
251	20	90.9	12	2	AAW94412	Aaw94412	Cancer pr
252	20	90.9	12	2	AAW92730	Aaw92730	Human tac
253	20	90.9	12	2	AAV03157	Aay03157	Substance
254	20	90.9	12	4	AAB92032	Aab92032	Galanin p
255	20	90.9	12	4	AAB70553	Aab70553	Octopus t
256	20	90.9	12	4	AAB70557	Aab70557	Octopus t
257	20	90.9	12	4	AAB70554	Aab70554	Octopus t
258	20	90.9	12	4	AAG62772	Aag62772	Amino aci
259	20	90.9	12	4	AAG62775	Aag62775	Amino aci
260	20	90.9	12	4	AAG62769	Aag62769	Amino aci
261	20	90.9	12	4	AAB84528	Aab84528	Amino aci
262	20	90.9	12	4	AAB98873	Aab98873	Chimeric
263	20	90.9	12	4	AAB98870	Aab98870	Chimeric
264	20	90.9	12	4	AAB98867	Aab98867	Chimeric
265	20	90.9	12	5	ABB09480	Abb09480	Substance
266	20	90.9	12	5	AAU96753	Aau96753	Substance
267	20	90.9	12	5	AAU96756	Aau96756	Substance
268	20	90.9	12	5	ABB04922	Abb04922	Memory-en
269	20	90.9	12	5	AAE19496	Aae19496	Substance
270	20	90.9	12	5	AAE19499	Aae19499	Substance
271	20	90.9	12	5	AAE19493	Aae19493	Substance
272	20	90.9	12	7	ABR84705	Abr84705	Aggrecona
273	20	90.9	13	2	AAR29593	Aar29593	Vertebrat
274	20	90.9	13	2	AAW92700	Aaw92700	Human tac
275	20	90.9	13	2	AAV03158	Aay03158	Substance
276	20	90.9	13	4	AAG62773	Aag62773	Amino aci
277	20	90.9	13	4	AAG62770	Aag62770	Amino aci
278	20	90.9	13	4	AAG62776	Aag62776	Amino aci
279	20	90.9	13	4	AAB98874	Aab98874	Chimeric
280	20	90.9	13	4	AAB98871	Aab98871	Chimeric
281	20	90.9	13	4	AAB98868	Aab98868	Chimeric
282	20	90.9	13	5	AAU96757	Aau96757	Substance
283	20	90.9	13	5	AAU96754	Aau96754	Substance
284	20	90.9	13	5	AAE19494	Aae19494	Substance
285	20	90.9	13	5	AAE19497	Aae19497	Substance
286	20	90.9	13	5	AAE19500	Aae19500	Substance
287	20	90.9	14	2	AAV03159	Aay03159	Substance
288	20	90.9	14	4	AAB91440	Aab91440	Tachykini
289	20	90.9	14	4	AAG62771	Aag62771	Amino aci
290	20	90.9	14	4	AAG62777	Aag62777	Amino aci
291	20	90.9	14	4	AAG62774	Aag62774	Amino aci
292	20	90.9	14	4	AAB98872	Aab98872	Chimeric
293	20	90.9	14	4	AAB98869	Aab98869	Chimeric
294	20	90.9	14	4	AAB98875	Aab98875	Chimeric



295	20	90.9	14	5	AAU96755	Aau96755	Substance
296	20	90.9	14	5	AAU96758	Aau96758	Substance
297	20	90.9	14	5	AAE19498	Aae19498	Substance
298	20	90.9	14	5	AAE19495	Aae19495	Substance
299	20	90.9	14	5	AAE19501	Aae19501	Substance
300	20	90.9	14	6	ABP56241	Abp56241	Targeting
301	20	90.9	14	8	ADE64332	Ade64332	Radiophar
302	20	90.9	15	2	AAW75250	Aaw75250	Fragment
303	20	90.9	15	5	AAE27016	Aae27016	Human gen
304	20	90.9	15	5	AAE27154	Aae27154	Human gen
305	20	90.9	15	6	ABU65027	Abu65027	Human sec
306	19	86.4	10	2	AAW92698	Aaw92698	Human tac
307	19	86.4	10	2	AAW92696	Aaw92696	Human tac
308	19	86.4	10	4	AAB91370	Aab91370	Tachykini
309	19	86.4	11	2	AAR21968	Aar21968	Cyclic su
310	19	86.4	11	2	AAW92687	Aaw92687	Human tac
311	19	86.4	11	4	AAB50314	Aab50314	Previn pe
312	19	86.4	11	4	AAB50315	Aab50315	Previn pe
313	19	86.4	11	4	AAB50313	Aab50313	Previn pe
314	19	86.4	14	2	AAW47171	Aaw47171	Antigenic
315	19	86.4	14	3	AAB01939	Aab01939	MAB 12f3.
316	19	86.4	14	4	AAE12476	Aae12476	XMEL anti
317	19	86.4	14	5	AAE26378	Aae26378	Melag 7 a
318	19	86.4	14	6	ABG72920	Abg72920	Anti-mrk-
319	18	81.8	9	2	AAW45712	Aaw45712	MAGE-3 19
320	18	81.8	10	7	ADD94752	Add94752	Human SIM
321	18	81.8	10	7	ADD94536	Add94536	Human SIM
322	18	81.8	10	7	ADD94736	Add94736	Human SIM
323	18	81.8	10	7	ADD94724	Add94724	Human SIM
324	18	81.8	10	7	ADD94684	Add94684	Human SIM
325	18	81.8	10	7	ADD94543	Add94543	Human SIM
326	18	81.8	12	1	AAP50357	Aap50357	Hylambati
327	18	81.8	12	2	AAW79348	Aaw79348	Staphyloc
328	18	81.8	15	4	AAB67932	Aab67932	Internal
329	17	77.3	5	2	AAW92702	Aaw92702	Human tac
330	17	77.3	5	4	AAG99352	Aag99352	Atypical
331	17	77.3	5	4	AAG99346	Aag99346	Atypical
332	17	77.3	5	5	AAG80461	Aag80461	Enzyme cl
333	17	77.3	5	5	ABB10089	Abb10089	Substance
334	17	77.3	6	2	AAW29545	Aaw29545	Suc(psi(C
335	17	77.3	6	2	AAY22121	Aay22121	Human uri
336	17	77.3	6	4	AAB82442	Aab82442	Fluorinat
337	17	77.3	6	4	AAB82421	Aab82421	Fluorinat
338	17	77.3	6	4	AAB82449	Aab82449	Fluorinat
339	17	77.3	6	4	AAB82420	Aab82420	Fluorinat
340	17	77.3	6	4	AAB82450	Aab82450	Fluorinat
341	17	77.3	7	2	AAW29544	Aaw29544	Asp-Ser(p
342	17	77.3	7	2	AAW29543	Aaw29543	Asp-Ser-P
343	17	77.3	7	2	AAW29547	Aaw29547	Asp-Ser-P
344	17	77.3	7	2	AAW29540	Aaw29540	Asp-Ser-P
345	17	77.3	7	4	AAB82418	Aab82418	Fluorinat
346	17	77.3	7	4	AAB82437	Aab82437	Fluorinat
347	17	77.3	7	4	AAB82445	Aab82445	Fluorinat
348	17	77.3	7	4	AAB82446	Aab82446	Fluorinat
349	17	77.3	7	4	AAB82424	Aab82424	Fluorinat
350	17	77.3	7	4	AAB82419	Aab82419	Fluorinat
351	17	77.3	7	4	AAB82425	Aab82425	Fluorinat

# ALIGNMENTS

## RESULT 1

AAW64648

ID AAW64648 standard; peptide; 12 AA.

XX

AC AAW64648;

XX

DT 23-OCT-1998 (first entry)

XX

DE Synthetic SEB-related peptide (position 13-24).

XX

KW Enterotoxin B; SEB; pyrogenic exotoxin; PET; protective immunity;  
KW toxic shock; toxin-mediated activation; T-cell; antagonist; inhibitor;  
KW therapeutic; vaccine; food poisoning.

XX

OS Synthetic.

OS Staphylococcus aureus.

XX

PN WO9829444-A1.

XX

PD 09-JUL-1998.

XX

PF 30-DEC-1997; 97WO-IL000438.

XX

PR 30-DEC-1996; 96IL-00119938.

XX

PA (YISS ) YISSUM RES & DEV CO.

XX

PI Kaempfer R, Arad G;

XX

DR WPI; 1998-388042/33.

XX

PT New peptide(s) derived from pyrogenic exotoxin - useful for, e.g.  
PT antagonising toxin-mediated activation of T cells and prevention or  
PT treatment of toxic shock caused by exotoxin(s).

XX

PS Example 2; Page 38; 68pp; English.

XX

CC AAW64636-W64657 are peptides homologous to the amino acid sequence of a  
CC fragment of a pyrogenic exotoxin (PET), and derivatives of the peptide  
CC capable of eliciting protective immunity against toxic shock induced by  
CC PET or by a mixture of PETs. Such peptides are also capable of  
CC antagonising toxin-mediated activation of T-cells, inhibiting expression  
CC of pyrogenic toxin (PT)-induced mRNA encoded by IL-2, IFN-gamma or TNF-  
CC beta genes. The peptides may be used to prepare therapeutics or vaccines  
CC for the treatment of prophylaxis of toxin-mediated activation of T cells  
CC and eliciting protective immunity against toxic shock induced by PETs.  
CC They can also be used for the treatment of harmful effects (especially  
CC food poisoning) and toxic shock caused by PET. Antiserum to the peptides  
CC can also be used for alleviating toxic shock induced by PET

XX

SQ Sequence 12 AA;

Query Match

95.5%; Score 21; DB 2; Length 12;

Best Local Similarity 80.0%; Pred. No. 82;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 FXGLM 5  
| |||  
Db 5 FTGLM 9

RESULT 2

AAM97765

ID AAM97765 standard; peptide; 14 AA.

XX

AC AAM97765;

XX

DT 24-JAN-2002 (first entry)

XX

DE Human peptide #1040 encoded by a SNP oligonucleotide.

XX

KW Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic;  
KW neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer;  
KW amyloid protein; angiopoietin; apoptosis related protein; cadherin;  
KW cyclin; polymerase; oncogene; histone; kinase; colony stimulating factor;  
KW complement related protein; cytochrome; kinesin; cytokine; interferon;  
KW interleukin; G-protein coupled receptor; thioesterase; inflammation;  
KW multifactorial disease; autoimmune disease; infection;  
KW nervous system disease.

XX

OS Homo sapiens.

XX

PN WO200147944-A2.

XX

PD 05-JUL-2001.

XX

PF 28-DEC-2000; 2000WO-US035498.

XX

PR 28-DEC-1999; 99US-0173419P.

PR 27-DEC-2000; 2000US-00173419.

XX

PA (CURA-) CURAGEN CORP.

XX

PI Shimkets RA, Leach M;

XX

DR WPI; 2001-465210/50.

XX

PT Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases,  
PT oncogenes and histones, useful for diagnosing and treating, e.g. cancer,  
PT autoimmune diseases and infections.

XX

PS Disclosure; Page 3895; 4143pp; English.

XX

CC The present invention relates to oligonucleotides (see AAL26793-AAL34659)  
CC encoding polymorphic variants of proteins related to amylases, amyloid  
CC proteins, angiopoietin, apoptosis related proteins, cadherin, cyclin,  
CC polymerase, oncogenes, histones, kinases, colony stimulating factors,  
CC complement related proteins, cytochromes, kinesins, cytokines,  
CC interferons, interleukins, G-protein coupled receptors and thioesterases.  
CC The present sequence is a peptide encoded by one such oligonucleotide.

CC The oligonucleotides and the peptides encoded by them may be used in the  
CC prevention, diagnosis and treatment of diseases associated with  
CC inappropriate expression of the proteins listed above. Disorders that may  
CC be prevented, diagnosed and/or treated include multifactorial diseases  
CC with a genetic component, such as autoimmune diseases (e.g. rheumatoid  
CC arthritis, multiple sclerosis, diabetes, systemic lupus erythromatosus  
CC and Grave's disease), inflammation, cancer (e.g. cancers of the bladder,  
CC brain, breast, colon and kidney, leukaemia), diseases of the nervous  
CC system and an infection of pathogenic organisms  
XX  
SQ Sequence 14 AA;

Query Match 95.5%; Score 21; DB 4; Length 14;  
Best Local Similarity 80.0%; Pred. No. 95;  
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FXGLM 5  
| |||  
Db 9 FSGLM 13

Search completed: April 7, 2004, 09:24:58  
Job time : 75 secs